Universals

J. P. Moreland

Central Problems of Philosophy
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J. P. Moreland

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Preface and acknowledgements

This book is a study in analytic ontology with a focus on issues and options at the core of the problem of universals. The problem of universals is actually a cluster of related issues central to debates among extreme nominalists, moderate nominalists and advocates of various forms of realism about the ontological status of properties. The book is intended to be an introduction to the topic and I have aimed the level of exposition at upper level undergraduates, graduate students and professional philosophers, and I believe the book should be of value to all three groups. Given the intended audience, the book is an introduction, not in the sense of being aimed at beginning students in philosophy, but in the sense of seeking to focus on the most important issues central to the subject matter. Because of this focus and space limitations, I have of necessity refrained from addressing certain topics in the study of universals that have been prominent in the past ten years, specifically: the relationship between higher and lower order universals; the relationship between universals and causation, laws of nature and scientific explanation; the use of moderate (especially trope) nominalism to do work in various areas of philosophy. As interesting as these topics may be, those who study them bring to their reflections positions on the more fundamental topics about universals. And, often, philosophers who discuss these current issues seem unfamiliar with or inadequately appraised of important distinctions and arguments at the core of those more fundamental topics. For these reasons, I have chosen to focus in this book on those subjects that have been of perennial importance to the study

of universals. There is a gap in the recent literature in these areas on which I focus, and I have tried to make a contribution to filling that gap.

Several people have been instrumental in helping me with this project. I want to thank Dan Yim and Joshua Blander for their encouragement to undertake the book. I am grateful to Paul Copan for informing me about the series to which my book contributes, and I have been helped greatly in the manuscript preparation by Lisa Vasquez and Robert Garcia. My two editors, John Shand and Steven Gerrard, have been an absolute delight to work with. Finally, my philosophical mentor, Dallas Willard, and my colleagues in philosophy at Biola University have played a special role in my own philosophical development, and it is a joy for me to acknowledge them in this way.

J. P. Moreland

1 The problem(s) of universals

Along with the metaphysics of substance, the problem of universals is the paradigm case of a perennial issue in the history of philosophy. The problem of universals is actually a set of related issues involving the ontological status of properties. Prima facie, it would seem that properties exist. Indeed, one of the most obvious facts about the world is that it consists of individual things that have properties and that stand in relations to other things.[1] It would also seem that several objects can have the same property; for example, several things can possess the same shade of red. But both the existence and nature of properties have long been a matter of dispute and the problem of universals is the name for the issues central to this debate.

Those who accept the existence of universals have appealed to a number of phenomena to make their case (e.g. the meaningfulness of language, the lawlike nature of causation, the inter-subjectivity of thinking, our ability to classify and recognize new entities, gradation and the need for perfect standards or ideal paradigms). However, historically, the problem of universals has been mainly about the "One and Many" (a.k.a. "One over Many", "One in Many"), which involves giving an account of the unity of natural classes. To illustrate, consider the following words: RED, RED, BLUE. How many words are in the sequence? Two answers seem possible: either two or three words. There would seem to be two word types and three word tokens, where a type is a kind of word that can be instanced in different places and a token is a specific instance of a type. If we form a set containing the first two tokens,

the unity of the set would seem to be grounded in the fact that both tokens have the same word type in common. Similarly, if we had seven red and three blue balls, there would be a sense in which we would have two different colours and another sense in which we would have ten different colours. There would be two kinds of colours – red and blue – and ten instances of colour. A set containing the seven red balls seems to exhibit a natural unity in that each ball has something in common not possessed by any of the blue balls; namely, the colour red. Issues and options regarding the One and Many have formed the core of the problem of universals since the time of Plato. What are we to make of sameness of type? What distinguishes a class of tokens that mark off a real natural class from a contrived artificial class?[2] What grounds class membership in natural classes?

However, since the problem of universals is about the ontological status of properties, it goes beyond the One and Many and includes these questions:

- Do properties exist?
- If properties exist, are they universals or particulars?
- If properties are universals, are they abstract objects?
- What is the relationship between a property and the thing that has it? Is the property in what has it and, if so, what sort of "in" is this (spatial, non-spatial)?
- If properties exist, can they exist even if no particulars exemplify them?
- In addition to properties and concrete particulars (roughly, individual things like balls and baboons), are there property-instances? If so, are they simple or complex entities?
- If properties are universals, what account can be given of the individuation of two entities that have all their pure properties in common?[3]

The chapters to follow take up each of these questions along with other topics central to debates about universals. The remainder of this chapter highlights central issues and distinctions relevant to debates about properties.

Issues and options regarding the ontological status of properties

Attribute-agreement and extreme nominalism, moderate nominalism and realism

The issues and options in the debate about exemplification can be clarified by an example of what is called attribute-agreement.[4] Suppose we have before us two round red spots. Suppose further that each spot has the "same" shade of red and the same roundness.[5] Let us call the two spots Socrates and Plato. Let us also use red_1 and red_2 to stand for the redness of Socrates and the redness of Plato, respectively.

Attribute-agreement can be interpreted in three general ways. First, there is an interpretation called extreme nominalism. There are several varieties of extreme nominalism, but they all exclude attributes as they are construed by the realists or nominalists. The extreme nominalist offers this reductive analysis:

a has the attribute F, if and only if, Q.

Different versions of extreme nominalism will spell out Q in different ways.[6] A predicate extreme nominalist parses Q as "the predicate 'F' is true of *a*"; a class extreme nominalist as "*a* is a member of the class of F-things"; and a concept extreme nominalist as "*a* falls under the concept F". The fundamental feature of this account of attribute-agreement and exemplification is its denial that attributes form an additional category of being distinct from the things that have them (unless, of course, a new category other than that of property is introduced, to which properties are reduced, e.g. predicates, classes, concepts, etc.). Rudolf Carnap, Nelson Goodman, W. V. O. Quine, Wilfrid Sellars and Anthony Quinton are important extreme nominalists.

The second major interpretation of attribute-agreement is called moderate nominalism. A moderate nominalist acknowledges the existence of qualities but denies that attribute-agreement is to be explained along realist lines where qualities are universals. The moderate nominalist denies that the *redness* of Socrates is numerically identical to the *redness* of Plato. Socrates and Plato may both have a determinate shade of colour that is "exactly alike". But the

two do not share the same numerically identical quality. Plato and Socrates each has a particular entity that is not multiply exemplifiable; a little red. Quality instances construed along moderate nominalist lines have various labels: "tropes",[7] "abstract particulars",[8] "perfect particulars",[9] "cases",[10] "aspects",[11] "unit properties",[12] "property instances"[13] and "moments".[14] G. F. Stout, D. C. Williams, C. B. Martin, and Keith Campbell are four important contemporary nominalists.

Finally, there are realist treatments of attribute-agreement. There are different varieties of realism. For example, Aristotelian realists disagree with Platonic realists over the question of the existence of uninstantiated universals. Traditional realists like Reinhardt Grossmann hold universals to be non-spatio-temporal abstract entities and realists like D. M. Armstrong take them to be multiply spatialized entities, located at the various places where the things exemplifying them exist. But realists are agreed in holding that when attribute-agreement obtains, it is to be explained by an appeal to universals. The realist will argue that Socrates and Plato both "partake of", "exemplify" or "instantiate" a single attribute: redness. Thus, properties are universals that are multiply-exemplifiable, and attribute-agreement involves various particulars having literally the same property. Recent important realists are Edmund Husserl, Gustav Bergmann, Reinhardt Grossmann, Nicholas Wolterstorff, Michael Loux and D. M. Armstrong.

Three important phenomena relevant to the debate about properties

As mentioned above, from the time of Plato realists have offered a wide variety of arguments in support of their views. However, three phenomena have been most important in the debate: predication, exact similarity and abstract reference.[15] In each case, the realist appeals to what appear to be obvious facts, claims that they have a straightforward and powerful way of accounting for those facts and challenges the extreme nominalist and moderate nominalist to come up with an equally plausible analysis. In this way, the realist believes that the burden of proof is on the other two schools of thought.

To probe the dialectic more deeply and relate these three phenomena to the traditional problem of universals (the unity of

natural classes), let us begin with predication by considering the following true statements:

(1) Socrates is red.
(2) Plato is red.

Realists have a very powerful, direct way of explaining the truth of sentences like (1) and (2): Socrates and Plato, have a property – redness – and the exemplification of redness by Socrates and Plato, respectively, is what grounds the truth of (1) and (2). Moreover, in relation to the One and Many, the redness of Socrates is identical to the redness of Plato and, more generally, redness is what grounds the unity of the natural class of red entities. Entities like Socrates and Plato are members of this (non-arbitrary) class because each has the same property which grounds class membership. A blue spot is not a member of this class because it fails to exemplify the relevant property. In light of the realist analysis of sentences like (1) and (2), the realist challenges the extreme and moderate nominalist to come up with alternative accounts that are adequate to explain the truth of sentences of this sort.

The second argument for realism focuses on certain obvious facts about resemblance. Many particulars in the world exactly resemble other particulars in various ways and these various ways constitute the respects of resemblance that obtain between or among the particulars. For example, Socrates and Plato are exactly similar to each other in being red. Moreover, the exact similarity between two objects can be made the object of an intuitive act; the resemblance itself can be made an object of direct awareness, it can be concretely distinguished, talked about and known. The realist will explain these facts by grounding exact similarity in a property exemplified by the two resembling entities that constitutes their respect of resemblance. Thus, the resemblance between Socrates and Plato mentioned above is grounded in the fact that both Socrates and Plato share the very same property, redness, and redness is the respect in which they exactly resemble each other. Related to the One and Many, the unity of a class of exactly resembling red objects is grounded in a numerically identical property – redness – exemplified by each class member while failing to be exemplified by objects excluded from class membership and that constitutes the

respect in which all members of the class resemble each other. The realist challenges the extreme and moderate nominalist to offer a better explanation of exact similarity.

The third argument for realism involves the phenomenon of abstract reference or, to state it non-linguistically, the fact that properties themselves have properties and stand in relations to other properties. Moreover, these facts appear to be necessary, unchanging ones in that they run throughout possible worlds. For example, consider the following sentences:

(3) Red resembles orange more than it resembles blue.
(4) Red is a colour.

The realist has a straightforward, powerful explanation for the truth of sentences (3) and (4) and the states of affairs they describe. They can claim that the key terms in (3) and (4), e.g. the subject term in (4), are abstract singular terms that refer to universals. This can be made explicit by the following paraphrases:

(3a) Redness resembles orangeness more that it resembles blueness.
(4a) Redness is a colour.

The realist also has a way of explaining the de re necessity that, prima facie, appears to characterize the relations among redness, orangeness and blueness expressed in (3a) and redness and colouredness in (4a). In (3a), the relations are internal relations (see below) among universals in the same quality-order and in (4a), the relation is a determinable/determinate predication relation between a second and first order universal. Historically, the phenomenon of abstract reference has not been an explicit aspect of debates about the One and Many to the degree that predication and exact resemblance have. Still, abstract reference is related to the One and Many in at least this way: redness, blueness, etc., are all entities in their own right, they form a natural class of colours (and are not members of the class, say, of tastes) in that redness *et al.* have the property of being coloured that grounds their membership in the class. Put differently, they are all determinates of the determinable colouredness. The realist challenges the extreme nominalist and nominalist to offer a better account of the truth of sentences like (3) and (4).

Three important issues in the exemplification of properties

Extreme nominalists deny that properties exist and in Chapter 2 we will analyse and evaluate alternative forms of extreme nominalism. Moderate nominalists and realists agree that properties exist but they give very different treatments of the nature and "exemplification" of properties. Morever, there are differences on these issues within the moderate nominalist and realist camps and Chapters 3–5 will examine these differences in detail. For now, it will be helpful to introduce a taxonomy of the main versions of moderate nominalism and realism regarding three important issues in analysing properties and exemplification. For clarity, I shall focus our discussion on the fact that Socrates is red. These three issues are:

- the nature of the "universal" redness;
- the relationship between redness and the quality-instance red_1, which is a constituent of Socrates;
- the problem of giving an assay of the quality-instance itself.

Let us consider these in order.

The Nature of the "Universal"

There are two major views – realist and moderate nominalist – of the "universal" redness, with important varieties of each. First, there is the realist position with four main versions. The first two (allegedly) realist versions hold that the universal does not enter into the being of its instances and, thus, is a one-*over*-many. One example of this version is model/copy realism according to which properties are abstract entities that exist outside space and time and do not enter into the particulars that supposedly have them. Instead, each particular has a copy of that property.

The model/copy view is not widely held because of the difficulties that have been raised against it. One such difficulty has been called the *Third Man Argument*. This argument points out that the model/copy view of properties and exemplification makes two assumptions that, taken together, lead to a vicious infinite regress:

- The *Non-identity assumption*: F things are F in virtue of some other thing, F-ness, which makes them F.
- The *Self-predication assumption*: F-ness is itself F.

The non-identity assumption asserts that, for example, several red things (Socrates, Plato, a brick) are red in virtue of some other entity, redness itself, which is copied in each red thing. The self-predication assumption implies that not only are individual red things red, but redness itself is red.

Many realists accept the second assumption but reject the first one. They argue that the non-identity assumption only applies to particulars and not universals; for example, it is true that all red *particulars* are red in virtue of some other entity (redness), but redness itself is red and not in virtue of something else. But the main point here is that the model/copy view implies both of these assumptions and, taken together, they lead to a vicious infinite regress, which can be seen as follows. If we ask of a set of several red things (Socrates, Plato, a brick) what it is that accounts for them being red, the non-identity assumption will tell us that this is due to some other entity besides the red things, redness itself, that makes them red by being copied in them. So Set 1, composed of three things (Socrates, Plato, a brick), is a set of red things because of redness.

But now, the self-predication assumption assures us that not only are Socrates, Plato and a brick red, but redness itself is red. This means that we can now puzzle over what it is that accounts for the redness of all the items in a new set, Set 2, composed of Socrates, Plato, a brick and redness itself. The non-identity assumption will demand that our answer must appeal to some *other* entity, call it redness_2, possessed by all the members of Set 2. But now we can form a new set, Set 3, composed of Socrates, Plato, a brick, redness and redness_2, and ask what it is that accounts for the fact that all members of this new set are red. The answer will appeal to redness_3, copied by all members in Set 3. This procedure generates a vicious infinite regress and, thus, the model/copy view should be rejected.

Another One over Many approach that is purportedly realist takes the universal to be a "kind". Advocates of this position usually accept the existence of both universals and abstract particulars. Adherents of this view have been J. R. Jones,[16] the Nicholas Wolterstorff of *On Universals*,[17] Michael Loux for universals in the category of substance[18] and many others.[19] Some would add Husserl to the list as well.[20] Wolterstorff, for example, tells us that a kind has two similarities and two differences when it is compared

to a set,[21] where "set" is defined in the standard way, viz. as a collection of members and such that Set A and Set B are identical if and only if they have all their members in common. Kinds are like sets in that examples of a kind are *members* of that kind. Kinds are universals to which instances *belong*. Thus, red_1 is a token of the kind redness. Secondly, there can be kinds of kinds, just as there can be classes of classes.

Despite these similarities, there are two decisive differences between sets and kinds. First, no set could have had different members from those it does have, whereas many kinds can have had different examples from those they do have. For example, there might have been some current examples of the dodo, although it is now extinct. There are possible worlds where a kind has fewer members and there are possible worlds in which a kind is extendible; where it has more members.[22] Secondly, while sets are identical just in case they have the same membership, kinds are not. Non-identical kinds may be coextensive in their members. For example, the dodo and the passenger pigeon are different kinds that have the same number of current members, namely, zero. I have suggested that this position is *purported* to be a realist one by its advocates, but in Chapter 4 we will find reasons for taking it as a version of moderate nominalism. The moderate nominalist orientation of this position will become clear, I hope, when we turn to the relationship between redness and red_1.

The next two versions of realism depict the universal as a One *in* Many. When Socrates is red, Socrates has the universal redness *in* it. The universal is not some perfect particular over and above Socrates' being red that is somehow copied in or otherwise related to Socrates. Redness is literally in Socrates as a constituent. The first variety of One in Many realism can safely be called the traditional view. It takes universals to be non-spatiotemporal abstract entities . Universals are literally in their instances, but they are not at the spatiotemporal location of those instances and the former are in the latter by means of a primitive non-spatiotemporal tie of predication. Gustav Bergmann,[23] Reinhardt Grossmann[24] and Michael Loux[25] (in the categories of property and relation) represent this view.[26]

A second version of One in Many realism is offered by D. M. Armstrong.[27] Armstrong rejects the axiom of localization (no entity

can exist at different places or at interrupted time intervals) and claims that universals are capable of being at several spatiotemporal locations at once. The universal redness is at the spatiotemporal location where Socrates exists. If naturalism is the view that the spatiotemporal world is all there is, then we can make a distinction between pure naturalism (all entities have a single location) and impure naturalism (some entities have multiple location). Moderate nominalists are pure naturalists and Armstrong is an impure naturalist.

So much for varieties of realism. The second major view of "universals" is a moderate nominalist one that comes in two main forms. The first moderate nominalist position was advanced by G. F. Stout.[28] He held that the "universal" redness is not a single indivisible quality numerically the same in each red thing. Rather, it is a class of abstract particulars or quality-instances where these are to be understood as simple entities that can only occur at one point in space at a given time. By "simple" Stout means basic or non-complex. An abstract particular is not itself a complex of more basic entities. Each abstract particular in the class "redness" exactly resembles each other abstract particular in the class and there is nothing outside the class that exactly resembles each member in the class; thus, redness is a class of abstract particulars or little reds which stand to one another in the relationship of exact resemblance.

According to Stout, the unity of the class of reds is not to be explained by their exact similarity to one another. Rather, exact resemblance is grounded in a *fundamentum relationis*, the distributive unity of the class.[29] On this view, a relation between two entities presupposes a complex unity into which both entities and the relation are combined. For example, consider two concrete particulars *a* and *b* existing in the relation above and below. In this view, this state of affairs presupposes a spatial complex in which *a* and *b* exist in that specific relationship. This spatial complex is a complex unity and is the *fundamentum relationis* of the spatial relation above and below. Likewise, with regard to resembling abstract particulars, the complex unity which is the *fundamentum relationis* of this resemblance is the distributive unity of the class. This distributive unity is ultimate and cannot be analysed. So abstract nouns like "redness" are not singular terms for Stout but general terms. "Redness" refers to a class of reds that are exactly

alike and this resemblance is grounded in the distributive unity of the class.[30]

The second version of moderate nominalism has been advanced by D. C. Williams[31] and Keith Campbell:[32] the "universal" redness is a set of little reds called tropes. Tropes are qualities that are, at the same time, particulars and not universals. The view differs from Stout's view in that now the unity of the set is grounded in the relation of exact similarity.[33]

Moderate nominalists differ in their analysis of exact similarity. Exact similarity is like identity in that it is transitive and symmetrical. It is hard to know what to say about reflexivity. One motive for making exact similarity irreflexive would be the moderate nominalist's desire to ground the diversity between two exactly similar tropes. If exact similarity were reflexive, then a given trope could be two instead of one. This is not a problem with identity, for even though it is reflexive, identity only holds between a thing and itself and not another thing. This is not the case, however, with exact similarity. If exact similarity is reflexive, it can hold between trope *a* and trope *b*, or between trope *a* and itself. A moderate nominalist might find some other ground for why *a* is one and not two, or they might leave it as a brute fact. But they could ground the diversity of exactly resembling tropes by holding that this relation, unlike identity, is irreflexive. So there is some presumption for taking it as irreflexive, but I do not think this is conclusive.

In addition to the formal features of exact similarity, there is the issue of whether to take it as an internal or external relation. D. C. Williams took it as an internal relation. Gustav Bergmann went so far as to say that "Provided one rejects the Platonic alternative (separable universals), one cannot make an articulate case for perfect particulars without introducing an alleged internal relation of equality, or, as it is also called, exact similarity".[34] Consider two entities, *a* and *b*, standing in a relation R. There are two things true of internal relations as they are normally construed. First, if the R of *a* to *b* is internal to *a*, then anything which does not have that R to *b* is not identical to *a*. If a relation is internal to some *x*, then when *x* loses R, it ceases to exist. Put another way, two or more entities are internally related if and only if there are properties of those entities that necessitate that the relation holds. Examples of internal relations would be "is the capital of" or "is larger than".

Secondly, internal relations are not primitive but, rather, are grounded in the natures of the entities they connect. As Gustav Bergmann put it,

> The ontological ground of an internal connection lies wholly "in" the two or more entities it connects. More precisely, it lies in their natures. The notion is so crucial that I reword it. *The ontological ground of an internal connection is the natures of the entities it connects and nothing else.* Still differently, an internal connection has no ontological ground of its own.[35]

More recently, D. M. Armstrong has defined an internal relation as a relation which is logically determined by the nature of the related terms.[36] Armstrong goes on to point out that we can explain why internal relations are such that given two internally related entities *a* and *b*, there is no possible world in which the objects remain unaltered but in which the internal relation fails to obtain by recognizing that internal relations are derived from and grounded in the natures of the entities so related.[37] If *a* is larger than *b*, then this state of affairs is grounded in the size of *a* and the size of *b*. Another way of putting this is to say that an internal relation is not a basic entity (which need not be grounded in a further entity) but is a derived one.

By contrast, exact similarity may be taken as an underived, primitive relation external to the entities it connects. External relations are those that are not internal. If two entities, *a* and *b*, stand in external relations to each other, then *a* and *b* can cease to stand in that relation and still exist. This may be the view of Keith Campbell, but as we shall see in Chapter 3, his writings are unclear in this regard and he has changed his position during the last few years.

The relationship between redness and the quality-instance red$_1$

Some philosophers reject the existence of quality-instances and accept only properties and concrete particulars in their analysis of properties and exemplification. On this view, if one embraces quality-instances, then one is a moderate nominalist. Thus, Reinhardt Grossmann says:

> A certain view about the nature of properties has had a grip on the minds of many philosophers. According to this view, the whiteness of billiard ball A is not the same thing as the whiteness of billiard ball B. Each ball has its own whiteness, so that we must distinguish between whiteness$_1$ and whiteness$_2$, whiteness$_1$ being the colour of A and whiteness$_2$ being the colour of B.[38]

Grossman seems to think that if a philosopher uses definite descriptions like "the F of A" or "the F of B" to refer to non-identical entities, then that philosopher is a moderate nominalist. In later chapters we will evaluate this claim. For those who accept quality instances like red$_1$, there are four major treatments of the relation between them and their associated universals. First, there is what can be called the traditional realist view, which assays a quality-instance as a complex entity consituted by three entities: the universal, a non-spatiotemporal nexus of exemplification and an individuator. The state of affairs of Socrates' being red is to be analysed as follows: a complex entity – a quality-instance, moment, etc. – which is "predicatively" red, is a part of the whole, Socrates.

In this view, then, redness is "predicated" of red$_1$. This relation has been called a variety of names: type/token, genus/species, part/whole and the relation of instancing or exemplification. Three important features of this relation should be mentioned. First, this predication relation is one of essential predication. This is why some philosophers call it a genus/species relation. The important point here is that the universal "covers the nature" of the quality-instance. Redness is an essential constituent *in* red$_1$. There is no possible world in which red$_1$ exists and is not red.

A second feature is a very crucial one. Regardless of how it is done, if the position is to remain a realist one, both the universality and the particularity of the abstract particular must be given an ontological ground. For the realist, the quality-instance must be a complex entity. There have been a variety of grounds given for the individuation of the quality-instance, including bare particulars, coordinate qualities, relations like space and time, and Leibnizian qualities like "being identical to red$_1$". We will explore problems of individuation in Chapter 7. Advocates of this general viewpoint would be Husserl (on one interpretation), Bergmann and Armstrong.

Finally, neither the universal nor the exemplification relation is spatiotemporal. When a particular exemplifies a universal, the resultant state of affairs – the particular having the universal – is itself particular. This is sometimes called the victory of particularity. Similarly, on this first view, when a universal is exemplified by a quality-instance, the resultant state of affairs, for example red_1, is spatiotemporal even though two of the entities that compose it (the universal, exemplification) are non-spatiotemporal.

An alternative realist view has been offered by D. M. Armstrong according to which a universal is in the thing that exemplifies it and both the universal and the exemplification relation are spatiotemporal entities. The universal is spatially in and, therefore, located at the same place as the entity possessing it. Aside from this difference, Armstrong's analysis is the same as version one above.

A third position on the relation between redness and red_1 is a moderate nominalist one. The relation is often called type/token, genus/species or kind/case. This view assays red_1 as a simple entity. Unfortunately, it fails to ground adequately the individuation of the quality-instance. This position is held by Loux in the category of substance, and it can be found in Wolterstorff. As I mentioned earlier, it might seem surprising to identify this view as a moderate nominalist one, since both Loux and Wolterstorff claim to be realists. I am sure that both of them would disagree with my label and we will probe this tension in Chapter 4. To state the main issue briefly, since they hold that quality-instances are simple entities, neither of them adequately solves the problem of grounding individuation and their positions fall into moderate nominalism. Since a quality-instance is simple, there appear to be two options about the kind and the kind/case relation. First, the kind may be a type of set or collection of quality-instances (without the extensional aspects of sets) that stand to those instances in a relation very similar to the $\in$ of set membership. Secondly, it may be a perfect particular over and above the being of its instances and not a constituent of them. Here the kind/case relation is some sort of model/copy relation or a primitive that would seem to bear an analogy to the model/copy relation. What makes this a moderate nominalist view regarding properties is the simplicity of quality instances and the rejection of a constituent ontology regarding them. Properties as kinds could still be abstract objects like sets, but

they are not true universals if such are taken to be multiply exemplifiable entities that are constituents of their instances.

Position four is uncontroversially a moderate nominalist one. This view clearly takes the relation between redness and red_1 to be the $\in$ of set membership. To say that red_1 "manifests" (Williams's term) the universal redness is to simply assert that red_1 is a member of the similarity set of exactly resembling red tropes. This view is held by Williams and Campbell.

An assay of the quality-instance red_1

Quality-instances have been assayed in a variety of ways, but from what we have already seen, there are two crucially different assays of them relevant to the realist/moderate nominalist debate: realists take quality instances to be complex entities with their natures in them as constituents and moderate nominalists take those instances to be simples.

First, "the F of *a*" can be assayed as a complex entity. Realists like Gustav Bergmann would assay "the redness of Socrates" as the universal redness, the nexus of exemplification, and an individuator; in his case, a bare particular. "The redness of Socrates" is a fact or state of affairs. Realists are concerned to ground both the universal nature (redness) and the particularity (red_1 or *"this* redness") in a quality-instance.

Second, the F of *a* (e.g., the redness of Socrates) can be assayed as a simple entity. J. R. Jones says it is the universal particularized;[39] Wolterstorff says it is the type tokened;[40] and Stout, Williams and Campbell say it is a member of the set or class of Fs. A trope in this view is a simple entity that has no other constituent outside the *infimae species* that grounds its exact similarity with other tropes in the same set. Thus, while the trope is simple, it sustains two functions: grounding exact similarity with other tropes in its similarity set and being individuated from them. This view is stated clearly by Campbell: " we must construct an ontology which does not accord the *particularizing* role to one sort of being while attributing *sortedness* (quality) to another. We require one item with both roles; the Williams system attempts this".[41] Both these functions are captured by "red" and the subscript "1" in "red_1". Likewise, both functions are captured by "a" and "red" in "a red". The nature and

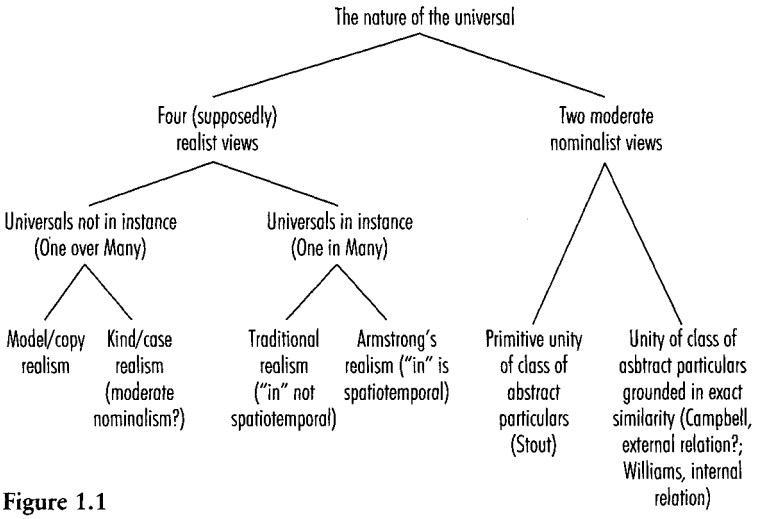
The nature of the universal
Four (supposedly) realist views
Two moderate nominalist views
Universals not in instance (One over Many)
Universals in instance (One in Many)
Model/copy realism
Kind/case realism (moderate nominalism?)
Traditional realism ("in" not spatiotemporal)
Armstrong's realism ("in" is spatiotemporal)
Primitive unity of class of abstract particulars (Stout)
Unity of class of asbtract particulars grounded in exact similarity (Campbell, external relation?; Williams, internal relation)

Figure 1.1

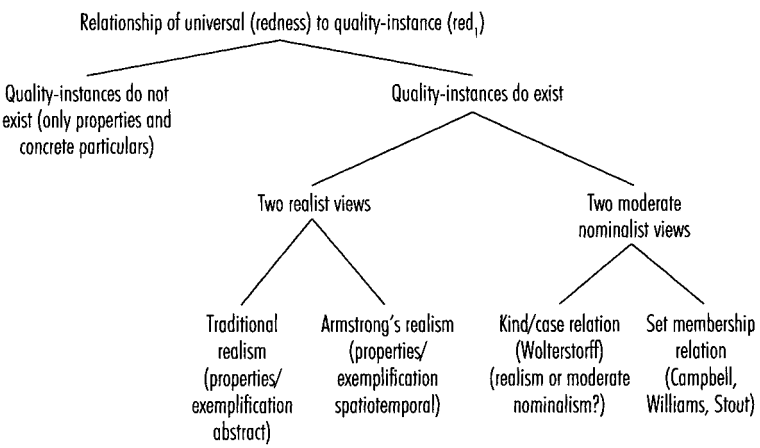
Relationship of universal (redness) to quality-instance (red_1)
Quality-instances do not exist (only properties and concrete particulars)
Quality-instances do exist
Two realist views
Two moderate nominalist views
Traditional realism (properties/ exemplification abstract)
Armstrong's realism (properties/ exemplification spatiotemporal)
Kind/case relation (Wolterstorff) (realism or moderate nominalism?)
Set membership relation (Campbell, Williams, Stout)

Figure 1.2

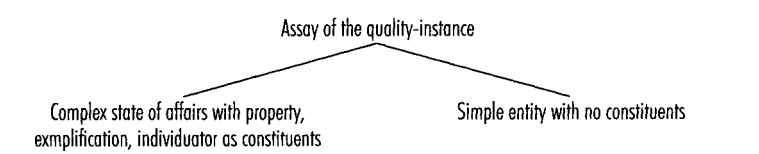
Assay of the quality-instance
Complex state of affairs with property, exmplification, individuator as constituents
Simple entity with no constituents

Figure 1.3

particularity of a trope differ by a mere distinction of reason and whenever A and B differ by a distinction of reason, A is identical to B.

Our discussion of properties and exemplification may be summarized as shown in Figures 1.1–1.3.

Universals and philosophical naturalism

The debate about properties can be related to the debate about philosophical naturalism and abstract entities. Howard Robinson has claimed that "materialist theories are incompatible with realist theories of universals. The tie between nominalism and materialism is an ancient one";[42] his remark is intended to apply to certain forms of contemporary philosophical naturalism. Along similar lines, Reinhardt Grossmann argues that naturalists are at war with what he calls ontologists.[43] According to Grossmann, the universe is the spatiotemporal totality of physical entities and the world includes every existent whatever, including non-spatiotemporal abstract entities. Naturalists deny the world and only believe in the universe; ontologists like Grossmann accept the world.

These claims are controversial and not all philosophers would accept them. At appropriate points in Chapters 2–7, we will investigate more fully the relationship between philosophical naturalism and the existence of universals, but for now it will be helpful to introduce this topic.

Following Grossmann, let us define the universe as the total spatiotemporal system of matter and (impersonal) energy; that is, as the sum total of material objects, in some way accessible to the senses and to scientific investigation. Let us also define the world as the sum total of everything that exists including non-spatiotemporal abstract entities.

Various issues are involved in a complete analysis of the notion of "abstract object", but for our purposes two different uses are important. The first is metaphysical: an abstract object is a real entity that is not in space or time. Something is in space (or time) if it has spatial (or temporal): (1) duration (we can ask how big or how long is it); and (some would say "or") (2) location (we can ask where or when is it). Abstract objects have neither spatial (nor temporal) location nor duration. For the naturalist under consideration, nothing exists that does not have spatial (or temporal) location and/or duration. A second sense of "abstract object" is

epistemological: an abstract object is one that is placed before the mind by an act of abstraction, by concentrating on that object and disregarding other things in one's field of awareness. As a rule of thumb, realists use the ontological sense of abstract object and extreme nominalists and nominalists employ the epistemological sense. The naturalist under consideration could accept abstract objects in the epistemological sense. We will use the ontological notion unless otherwise indicated.

How does the debate about naturalism and the world relate to the debate about properties? First of all, naturalists are either extreme or moderate nominalists. Advocates of these views believe only in the existence of spatiotemporal concrete or abstract particulars. They deny that properties are universals. Secondly, all realists agree that properties can be exemplified by many things at once; for example, the very same redness can be predicated of many red things at the same time. Does this mean that all realists believe that properties are abstract entities; that is, entities that are not inside of space and time? Let us review three realist views of properties and exemplification.

There are three main ways that realists have understood this relationship. The first is the model/copy view, according to which properties are abstract entities that exist outside of space and time. Moreover, properties remain outside space and time and do not enter into the particulars that "have" them. Instead, each particular has a copy of that property.

The next two realist views are advocated by impure realists and pure realists. These two schools of thought differ over a principle known as the axiom of localization:

> No entity whatsoever can exist at different spatial locations at once or at interrupted time intervals.

Focusing on spatial location, concrete particulars like Socrates are at only one spatial location at one time. They cannot be in more than one place at the same time. Now, the axiom of localization says that nothing can be in more than one place at the same time. Impure realists like D. M. Armstrong deny the axiom of localization. For them, properties are spatially contained inside the things that have them. Redness is at the very place Socrates is and redness

is also at the very place Plato is. Thus, redness violates the axiom of localization. Impure realists are naturalists at heart. Why? Because they accept the fact that properties are universals; that is, as entities that can be exemplified by more than one thing at once. But they do not want to deny naturalism and believe in abstract entities that are outside space and time altogether. Thus, impure realists hold that all entities are, indeed, inside space and time. But they embrace two different kinds of spatial entities: concrete particulars (Socrates) that are in only one place at a time, and universals (properties like redness) that are at different spatial locations at the very same time. For the impure realist, the exemplification relation is a *spatial container* relation. Socrates exemplifies redness in that redness is spatially contained inside of or at the same place as Socrates.

Pure realists such as Grossmann hold to a *non-spatial* (and atemporal) view of exemplification. Redness is "in" Socrates in the sense that Socrates *has* or *exemplifies* redness within its very being. But neither redness nor the exemplification relation itself is spatial. Properties are not in the concrete particulars that have them like sand is in a bucket. The nexus of exemplification is not a spatial container type of relationship.

Thus, the impure realist accepts properties as universals but rejects them as abstract objects. The pure realist claims that the best way of understanding what it means to say that properties are universals is to view them as abstract objects. Moderate nominalists are pure naturalists because they accept the axiom of localization, impure realists are impure naturalists because they reject the axiom of localization but accept the idea that everything is in space and time is some sense, and pure realists reject naturalism altogether and embrace abstract objects.

Our discussion about extreme nominalism, moderate nominalism, and different form of realism can be summarized in Figure 1.4.

Key philosophical distinctions relevant to the problem of universals

It will be helpful for the pages to follow to close this first chapter with a brief description of two laws of identity and three metaphysical distinctions that surface regularly in discussions about universals.

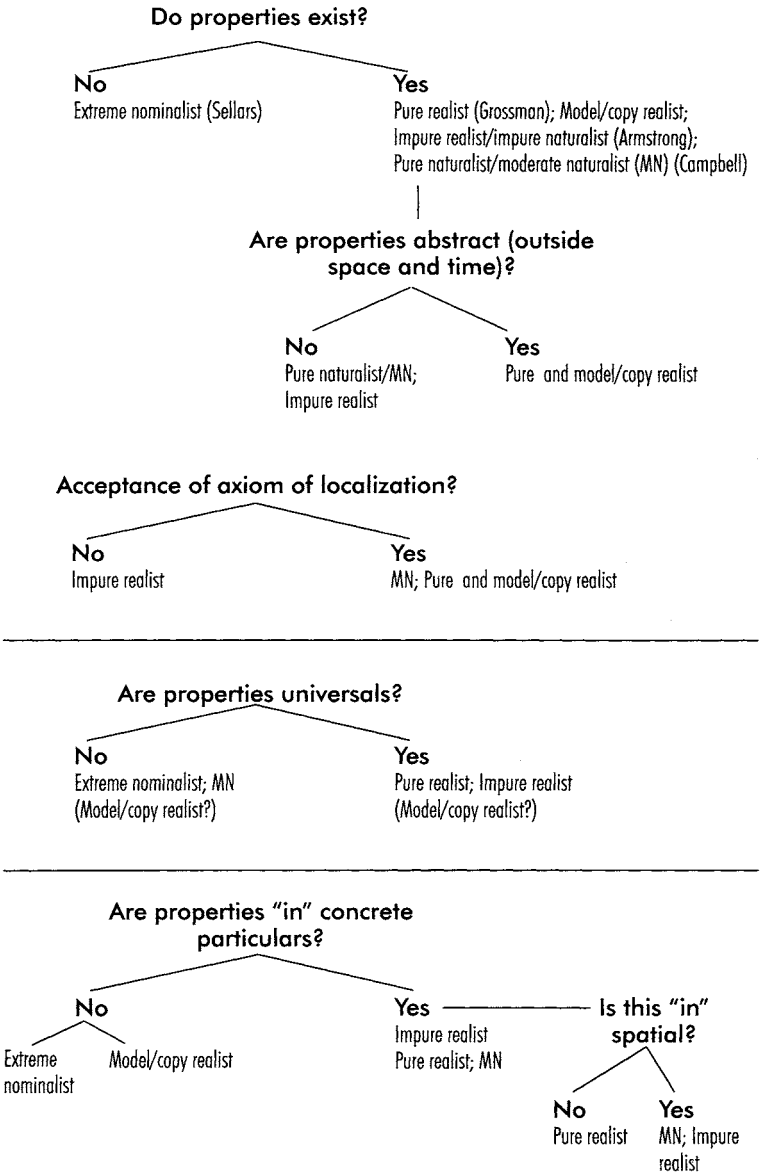
Do properties exist?
No
Extreme nominalist (Sellars)
Yes
Pure realist (Grossman); Model/copy realist;
Impure realist/impure naturalist (Armstrong);
Pure naturalist/moderate naturalist (MN) (Campbell)
Are properties abstract (outside space and time)?
No
Pure naturalist/MN;
Impure realist
Yes
Pure and model/copy realist
Acceptance of axiom of localization?
No
Impure realist
Yes
MN; Pure and model/copy realist
Are properties universals?
No
Extreme nominalist; MN
(Model/copy realist?)
Yes
Pure realist; Impure realist
(Model/copy realist?)
Are properties "in" concrete particulars?
No
Extreme nominalist
Model/copy realist
Yes
Impure realist
Pure realist; MN
Is this "in" spatial?
No
Pure realist
Yes
MN; Impure realist

Figure 1.4

Two laws of identity

There are two general laws of identity relevant to the problem of universals. The first is known as Leibniz's law of the indiscernibility of identicals:

$$(x)(y)[(x = y) \rightarrow (\mathrm{P})(\mathrm{P}x \leftrightarrow \mathrm{P}y)]$$

This principle states that for any x (e.g. that person who is J. P. Moreland) and for any y (that person who happens to be Eileen Spiek's youngest son), if "they" are identical to each other ("they" are, in reality, the very same entity), then for any property P (being 5'8", being human), P will be true of x (J. P. Moreland) if and only if P is true of y (Eileen Spiek's youngest son). In general, everything is what it is and not something else. Everything is identical to itself and, thus, shares all properties in common with itself. This implies a test for non-identity or difference: if we can find one thing true of x not true of y or vice versa, then x is not identical to y. Leibniz's law of the indiscernibility of identicals is relatively uncontroversial in philosophy and from now on "the law of identity" shall be used to express this principle.

There is another, highly controversial law of identity that will be an important part of the discussion in Chapter 7: Leibniz's law of the identity of indiscernibles:

$$(x)(y)[(\mathrm{P})(\mathrm{P}x \leftrightarrow \mathrm{P}y) \rightarrow (x = y)]$$

This says that, for all x and y, if x and y have all and only the same properties, then they are identical to each other. Many philosophers take this principle to be false because, among other things, they believe that there is more to a particular than its properties. For example, we could have two red and round discs that had the very same colour, shape, size, and so forth. They could share all and only the same properties but still be two discs and not one because an individual thing like a disc is not exhausted by its properties. But as we shall see in Chapter 7, not everyone agrees with these claims.

Three important distinctions

Closely related to the nature of identity is a set of distinctions that will be of critical importance for evaluating the arguments in later

chapters. The best place to turn for help in this regard is a discussion of three important distinctions by the great medieval philosopher Francis Suarez in Disputation VII of the *Disputationes Metaphysicae*. The first distinction Suarez mentions is the real distinction. This consists in the fact that two entities, A and B (e.g. my chair and my desk), are not identical and can exist as independent entities in separation from each other. The second major distinction is the distinction of reason. This is a purely mental distinction that does not actually intervene between the entities designated as distinct, as they exist in themselves, but only as they are distinguished in thought. According to Suarez, there are two types of distinctions of reason. First, there is the distinction of reasoning reason (*distinctio rationis ratiocinantis*) This has no foundation in reality and arises exclusively from the temporal activity of the process of thought. For example, we distinguish Peter from himself in referring to him twice when we say "Peter is Peter". Second, there is the distinction of reasoned reason (*distinctio rationis ratiocinatae*). This distinction arises from an inadequate conception by the mind of the object. Assuming with Suarez that God is a simple entity, an example here would be the distinction between God's mercy and justice. The key thing about any distinction of reason is this: if A and B differ by a distinction of reason (of either type), then A is identical to B.

Suarez goes on to argue that there is a third distinction that occupies a middle ground between the first two. This distinction is an actual one found in nature prior to any activity of the mind but it is not as great as the real distinction between two separable entities. Suarez says the modal distinction intervenes between an entity and its mode. He illustrates this by saying that the modal distinction obtains between the property known as quantity and the-inherence-of-quantity-in-a-specific-substance. A mode is a dependent, inseparable, genuinely distinct entity from that of which it is a mode. If a modal distinction obtains between two entities A and B (where B is a mode), there is non-identity between A and B and inseparability in this sense: A can exist without B but not vice versa.

These three distinctions and the two laws of identity are important to remember while grappling with the issues in the chapters to follow.

2 Extreme nominalism and properties

Realists claim to have a straightforward analysis of predication/exemplification, resemblance and abstract reference and they place a burden of proof on extreme and moderate nominalists to offer equally plausible accounts. Extreme nominalists deny the existence of properties altogether and offer the following reductive analysis:

a is F $\leftrightarrow$ Q

Different versions of extreme nominalism (EN) spell out Q in different ways. Five such versions are predominant. Predicate extreme nominalists analyse Q as "*a* falls under 'F'" or "'F' correctly applies to *a*". Concept extreme nominalists take Q as "*a* falls under the concept F" or "the concept F correctly applies to *a*". Mereological or exploded object extreme nominalists understand Q as "*a* is a part of the aggregate of F things". Class extreme nominalists reduce Q to "*a* is a member of the class of F things". Finally, resemblance extreme nominalists treat Q in one of two way: "*a* appropriately resembles a paradigm case of an F thing" or "a is a member of the class of appropriately resembling F things".

After presenting three preliminary issues, the chapter analyses these versions of EN in the context of predication/exemplification, resemblance and abstract reference. It is important to bear in mind that resemblance may be either the phenomenon to be analysed or part of the analysis of predication/exemplification. With this in mind, the first four versions of EN shall be presented in the context of predication/exemplification. Resemblance EN will be discussed

in connection with both the phenomenon of predication/exemplification and resemblance and, finally, abstract reference will be probed as it relates to EN in general.

Preliminary issues

Before investigating EN treatments of the three core issues, it is important to grasp certain relevant topics.

Infinite regresses

Infinite regress arguments figure prominently in debates about universals. An infinite regress argument tries to show that some thesis, task or state of affairs is defective because it involves a problematic "infinite regress". There are at least three forms of infinite regress arguments. Form one argues that a thesis is defective because it generates an infinite series that, in fact, does not exist. Form two argues that a thesis is defective because it generates an actual infinite ($\aleph_0$) number of entities (or tasks) and this is uneconomical. $\aleph_0$ may be defined as a set that can be put into one-to-one correspondence with either the set of natural numbers or with a proper subset of itself.

Form three involves claiming that a thesis generates a "vicious" infinite regress. How should "vicious" be characterized here? At least three characterizations have been offered. Roderick Chisholm says that "One is confronted with a vicious infinite regress when one attempts a task of the following sort: Every step needed to begin the task requires a preliminary step".[1] For example, if the only way to tie together any two things whatever is to connect them with a rope, then one would have to use two ropes to tie the two things to the initial connecting ropes, and use additional ropes to tie them to these subsequent ropes, and so on. According to Chisholm, this is a vicious infinite regress because the task cannot be accomplished.

D. M. Armstrong claims that when a reductive analysis of something contains a covert appeal to the very thing being analysed, it generates a vicious infinite regress because the analysis does not solve anything, but merely postpones a solution.[2] No advance has been made. He says that this is like a man without funds who writes cheques to cover his debts, and so on, forever.

Thomas Aquinas distinguishes *per se* and *per accidens* regresses and claims that the former are vicious, while the latter are not.[3] According to Aquinas, there are two features of a *per se* regress:

- It is not just a list of members, but an ordering of members in the sequence.
- The relationship among the members of the series is transitive. If *a* stands in R to *b* and *b* in R to *c*, then *a* stands in R to *c*, and so on.

Per accidens regresses may or may not fulfil the first condition but they do not exhibit the second. Aquinas uses a series of efficient causes as an example of a *per se* regress and a series generated by the "father of" relation to illustrate a *per accidens* regress. According to Aquinas, if there is not a first member in the series that simply has the relevant feature in itself, no other member of the series will have that feature since each subsequent member can only "pass on" that feature if it first receives it.

Other philosophers add to this that a *per se* regress is impossible because it involves traversing an actual infinite and that cannot be done. To illustrate, one cannot count from 1 to $\aleph_0$ for no matter how far one has counted, he will still have an infinite number of items to count. Such a task can begin, but it cannot be completed. Moreover, trying to count from $-\aleph_0$ to 0 can neither be completed (it involves the same number of tasks as going from 1 to $\aleph_0$) nor begun for the reasons given above by Chisholm: trying to reach any number in the past will itself require an infinite traversal as a preliminary step. Now in a *per se* regress, the transitivity of the relation ordering the regress implies that the dependence among members runs from the earlier to latter members. Thus, such regresses are precisely like traversing from $-\aleph_0$ to 0.

When we examine predicate EN, we will look at the difference between object and relation regresses.

Primitives

Some entities are derivative, that is, they may be analysed in terms of more fundamental constituents. A primitive is a entity (e.g. concept, thing) that cannot be further analysed. Virtually all

metaphysical theories have primitives and it is always open to a philosopher to claim that some entity or other is unanalysable. For example, some say that personal identity through change is primitive; others reject this and analyse personal identity in more basic terms (e.g. continuity of memory, character, bodily resemblance).

When one philosopher claims an entity is primitive and another rejects this assertion, how should the dialectic proceed? There are three things one can do in association with a claim that an entity is primitive. First, one can point to the phenomenon itself and invite others to attend to it similarly in the hopes that their awareness of the phenomenon will persuade them that the entity is primitive. Secondly, one can clarify the relations in which the primitive entity stands to other entities and thereby show the intellectual fruit of taking the entity as primitive. Thirdly, one can highlight problems that follow from denying that the entity is primitive, including rebutting proffered analyses of the entity. Generally speaking, such a dialectic involves a cost–benefit analysis of the different positions and decisive refutation is usually hard to obtain.

The truth-maker principle

D. M. Armstrong has advanced what he calls the truth-maker principle:

> [F]or every contingent truth at least (and perhaps for all truths contingent or necessary) there must be something in the world that makes it true. The "making" is not causality, of course: Rather, it is that in the world in virtue of which the truth is true.[4]

The truth-maker is the ontological ground that makes the proposition true in the sense that it is the relevant intentional object (e.g. substance, property, state of affairs) the proposition is about and to which it corresponds so as to be true. It is important to note that in cases where a proposition is about dependent, say supervenient entities, it is the supervenient entity itself, and not its subvenient base, that is the relevant truth-maker. Thus, on an epiphenomenal view of mental states, the truth-maker for "Jones is in pain" is Jones being in pain, not the brain state on which this state of affairs depends.

The truth-maker principle seems to be correct, although not all philosophers accept it. In fact, certain versions of EN require its rejection.

Arguments for EN

The remainder of the chapter will investigate EN treatments of the three phenomena of central importance to the problem of universals. To close out these preliminary remarks, it will be helpful to list briefly three main arguments for EN:

- The problems with moderate nominalism and realism are severe and justify acceptance of EN. We will look at these claims in Chapters 3 and 5.
- Philosophical naturalism is true and it either entails or else is best explicated in terms of EN. Two responses have been offered to this claim. Some accept it and reject philosophical naturalism (see Chapter 6). Others reject the claim and attempt to make room for either moderate nominalist or realist properties within a naturalist framework.
- EN is justified in light of Ockham's (or Occam's) Razor (a.k.a. the principle of simplicity, parsimony, economy) and, therefore, should be preferred. In response, two different forms of Ockham's Razor should be distinguished. First, there is the epistemological/methodological interpretation according to which one should not make an assertion, assume the existence of something, or multiply explanations without adequate reason. Given a simpler and more complicated explanation of something (as measured by their relative number of entities or kinds of entities, axioms, principles), one should prefer the simpler if they are equally adequate explanations because the more complicated one includes superfluous factors. Now this principle is hardly controversial and amounts to little more that the claim that something should be justified if it is employed in an explanation, assertion, etc. So understood, it applies to all views of universals. Specifically, realists claim that they do have adequate reasons for embracing universals and that entities should not be subtracted without necessity. So while this first interpretation may place a small burden of proof on the realist, it is negligible.

There is a second, ontological interpretation according to which reality itself is simply and, thus, a simpler ontology is a more accurate representation of reality than a less simple one. There are at least two problems with this interpretation. First, it is not clearly true and actually seems false in some cases. For example, the famous ideal gas equation, $PV = nRT$, is much simpler than the Van Der Waals equation, $(P+a/V^2)(V-b) = nRT$, but the latter is a more accurate representation of reality. Secondly, it is not easy to decide what criterion of simplicity should be employed. For example, one ontology may be simpler than its rival in the number of kinds of entities while the rival contains fewer entities overall. It is hard to come up with a non-question-begging way to decide which is simpler in the honorific sense. It would seem, then, that Ockham's Razor is best construed in the epistemological sense. So understood, it applies to all views, it places a slight burden on the realist to justify belief in universals, and the issue then becomes the strength and weaknesses of the different views regarding predication/exemplification, resemblance, abstract reference and other phenomena. With this in mind, let us turn to EN treatments of predication/exemplification.

Predication/exemplification

The realist challenge

Recall from Chapter 1 our two qualitatively indistinguishable red, round spots, Socrates and Plato. Realists claim that, linguistically, sentences such as "Socrates is red" employ the predicate term "red" that in some way or another picks out a universal, redness, that all and only red things possess. Put in a directly ontological way, realists claim that when one attends to Socrates and Plato, one can see that: Socrates' redness is not identical either to Socrates or to any other feature of Socrates; and the redness in Socrates appears to be identical to the redness of Plato. These claims are best explained by saying that Socrates and Plato have the same entity, redness, in them and this "way of being in" is properly called the nexus of exemplification. The realist challenges extreme nominalists to provide alternative analyses of predication/exemplification.

Predicate, concept, and mereological extreme nominalism

Predicate, concept, and mereological EN have enough features in common to allow us to analyse them together. Arguably, these are the weakest versions of EN and at least two criticisms have been widely taken to be successful against them. For exposition purposes, I shall focus on predicate EN, the view that "*a* is F" is to be analysed as "*a* falls under 'F'" or "'F' correctly applies to *a*".

First, linguistic predicates are neither necessary nor sufficient for specifying a property. They are not sufficient for there are contrived predicates that express no properties. For example, suppose we introduce the predicate "Rzim" to stand for being the Empire State Building, being the square root of minus one, and being the 1995 Super Bowl. Clearly, "Rzim" is a predicate but it determines no property whatsoever. Neither are predicates necessary. Socrates would still be red in a world bereft of language. The simple fact is that properties are far more numerous than are the predicates in human language. Moreover, on reflection, it is obvious to most people that properties are what make our predicates correctly apply to reality not vice versa. Put differently,

(1) "Red" correctly applies to Socrates.

is not primitive as predicate EN implies, but rather capable of analysis:

(1′) Socrates is red and "red" correctly applies to Socrates' redness.

A predicate EN could respond by appealing to possible predicates. In a world without language and where Socrates is red, he could say that there is a possible world where the predicate "red" does apply to Socrates. It is beyond the scope of our discussion to enter a dialogue about possible worlds. Suffice it to say that the ground for the possible applicability of "red" to Socrates seems to be the redness of Socrates, not vice versa.

D. M. Armstrong has raised a second objection to predicate EN:[5] it is involved in two vicious infinite regresses, an object and a relation regress. First let's consider the the object regress. According to predicate EN, each red thing is red because it falls under *the*

predicate "red". Consider this famous statement made by David Hume (my italics):

> When we have found a resemblance among several objects, that often occur to us, we apply *the same name* to all of them, . . . After we have acquired a custom of this *kind*, the hearing of *that name* revives *the idea* of one of those objects and makes the imagination conceive it with all its particular circumstances.[6]

As the italicized words bring out, predicate EN analyses one type (a property) in terms of another type (the predicate). The redness of red things is constituted by their relations to tokens of the word type "red", all tokens of this word type are so in virtue of falling under a second order word type, and so on to infinity. This regress is both uneconomical and vicious since it merely postpones but does not solve the problem of removing types from the EN framework.

Secondly, the relation regress. Consider all pairs of red things and predicate tokens of "red". In each pair, the red thing stands in *the* falling under relation to its word token, and this relation is itself a type of relation. The predicate EN may leave the falling under relation unanalysed, in which case they are stuck with a type or may claim that each first order falling under token is of the same type because a second order relational predicate correctly applies to it. But this generates both a new object regress (the second order predicate "falling under" itself, and so on) and the regress relation within our purview (since each first order falling under relation stands in the same type of relation – a first or second order falling under relation – with respect to the second order predicate, and so on). Either way, a type is part of the analysans and the regress is vicious.

These two objections have convinced most philosophers to reject predicate (concept, mereological) EN.[7]

Class extreme nominalism

A class is a collection of entities called members. Two classes are identical just in case they share all and only the same members.

Class EN is the view that some object a has the property of being F just in case *a* is a member of the class of F things. Moreover, on this view it is a brute fact that classes have the members they do and class inclusion/exclusion is not grounded in something more basic, e.g. resemblance between members. Socrates' being red turns out to be the fact that Socrates is a member of the class of red things.

At least five objections have been raised against class EN. First, a distinct class is not a necessary condition for there being a distinct property. This can be seen by what is known as the companionship difficulty, where there is a possible world with co-extensive properties that, contrary to class EN, are distinct. Consider a possible world with only three green sticky objects in it. Letting *g* and *s* stand for being green and being sticky, respectively, we can form the class of these three objects as follows: {*gs*, *gs*, *gs*}. Now class EN implies that there is only one property here since there is only one class, but clearly being green is a distinct property from being sticky in spite of the fact that there are not two distinct classes. Again, the properties of being a unicorn and of being a griffin are distinct, even though the class of griffins is identical to the null set as is the class of unicorns and, therefore, identical to each other.

A class EN could invoke a framework of possible worlds to solve this problem. It could be argued that the class of griffins and unicorns and the class of green objects and sticky ones will be different classes and, thus, different properties if we let the classes range throughout all possible worlds. But this response seems inadequate. In addition to problems with taking all possible worlds as being equally real with each other and with the actual world, there are properties that are necessarily coextensive (e.g. being trilateral and being triangular) and necessarily unexemplifiable (e.g. being a square circle and being a red taste). In these cases, the classes are identical, and, therefore, class EN implies that the properties are identical but, in fact, they are distinct. It will do no good to claim that in these cases the properties are really identical because clearly they are not; for example, being triangular has, but being trialateral fails to have, the property of being an angle.

Secondly, a distinct class of particulars is not a sufficient condition for there being a distinct property, as can be seen in the famous imperfect community argument. Consider a world with only these three objects in it: a red wooden thing (*rw*), a square wooden thing

(*sw*), and a red square thing, Even though this is a legitimate class – indeed, it is one in which each member exactly resembles all other members in the class – it is a contrived class for which there is no property. In general, contrived classes fail to have corresponding properties as class EN would seem to imply.

Thirdly, class membership does not determine a property; it's the other way around. Socrates' being red is an intrinsic feature of Socrates; one can decide its truth by inspecting Socrates alone. But Socrates' being a member of a set of other objects is a function of Socrates standing in relation to other things and one cannot decide whether or not this is the case by examining Socrates alone. Moreover, at least typical properties form what are called unrestricted classes; they can have a variable, potentially infinite number of exemplifications that form variable classes. Now the property itself does not change depending on how many times it is exemplified. But the identity conditions for a class imply that when classes change members they lose their identity. The class of red things might have turned out differently, but redness itself could not have turned out to be something else. Again, a framework of possible worlds could be invoked to solve this problem but the projection of a class of entities into a possible world seems to depend on which particulars have the relevant property in that world, and not vice versa.

This last remark suggests a fourth criticism: Some classes are natural and some are clearly contrived with nothing in common among their members except class membership. Now the realist grounds the difference in the fact that all the members of natural classes have a property in common while all the members of contrived classes fail to one. Obviously, this move in unavailable to an advocate of class EN since it implies that: properties just are classes of particulars; and there is nothing prior to class membership to distinguish natural from contrived classes.

Two responses have been offered to this argument. Some claim that all classes do, in fact, count for a property so that there is no real distinction between natural and contrived classes, but this seems clearly false. The class of red objects is natural; the class listed above in connection with the imperfect community is not. Others argue that it is just a brute fact that some classes are natural and others are not and there is no metaphysical ground for this brute fact. But this appears to be a mere assertion and, in light of

the arguments listed above, it is more plausible to hold that there is, indeed, a ground for the difference. It may not be the one realists offer (e.g. resemblance EN implies it is the relation of exact similarity among all and only members of a natural class) but that such a ground exists seems hard to deny.

Finally, class EN seems to generate both the object and relation regresses. Regarding the object regress, class EN says that *a* has the property F if and only if *a* is a member of the class of F things. But now the class of F things must be taken to exist and it seems to have the property of being a class or, more precisely, classhood. Now a class EN could respond that the fact that the class of F things has the property of being a class may be analysed in terms of the class of F things itself being a member of the unit class whose sole member was the class of F things. Still, it seems reasonable to ask of this new class just what it is that makes it a class. After all, it is a type of thing.

Moreover, whatever it is that makes it a class must be intrinsic to it and not some external relation it sustains to something else (e.g. membership in a higher class). And it would seem to be the case that it is the property of classhood that makes this second order class a class. If so, then the object regress is generated. This is a vicious regress because at each stage the analysans has a property and this is precisely the target of reductive analysis, so no advance has been made.

If a class EN denies that it is the property of classhood, then they are still committed to an actual infinite number of ascending orders of classes. At the very least, this is uneconomical, a value EN advocates embrace. Moreover, this regress seems vicious. Why? Let the class of F things be level 0, the unit class containing the class of F things be level 1, and so on. Now a class at level n cannot have members if it does not exist and it cannot exist if it doesn't have the proper "nature" to be a class. Yet this class's nature at level n consists in its being a member of a class at level $n + 1$. If a thing ontologically depends on its nature (however it is analysed) to exist in the sense that its nature could exist if it did not but not vice versa (e.g. being human could exist without Quine existing but not vice versa), then there appears to be the kind of ontological dependency from higher to lower entities in the series of classes that constitutes the *per se* type regress. If so, then on this alternative, there is a vicious object regress.

Less controversially, class EN seems to generate the relation regress. According to class EN *a* is F if and only if *a* is a member of the class of F things. Now this means that *a* stands in the membership relation (∈) to that class. Since this is a *type* of relation (it has several tokens, it differs from, say, various spatial relations), the analysans still has a type in it (i.e. universality, kindedness) and this is just what the analysis sought to avoid. It will do no good to analyse all the first order tokens of ∈ in terms of ordered pairs; for example, to say that Socrates is a member of the class of red things is to say the ordered pair <Socrates, the class of F things> is a member (∈) of the class of all ordered pairs standing in the class membership relation. This analysis explicitly employs e as a kind of relation because "<Socrates, the class of F things> is a member (∈) of . . ." means that <Socrates, the class of F things> stands in *the* ∈ relation (a kind of relation) to the relevant set and, thus, it fails to eliminate reference to a kind. Therefore, it falls victim to the relation regress.

Resemblance as a phenomenon and a solution to predication

Resemblance may be taken as either a phenomenon for metaphysical analysis or as part of the correct analysis to the phenomenon of predication. Taken as a phenomenon, cases where *a* resembles *b* can be analysed in terms of predication, e.g. "red" or the concept red is true of both *a* and *b* (predicate/concept EN), *a* and *b* are both parts of the relevant aggregate (mereological EN) or co-members of the same "natural" class (class EN).

None of the versions of EN studied so far leaves resemblance as part of its analysis of predication. In this way, resemblance EN is different and it may be understood as either an analysis of predication or the phenomenon of resemblance. In the former case, resemblance EN amounts to the view that *a* has the property F if and only if either *a* suitably resembles a paradigm case(s) of F things or *a* is a member of the class of all and only suitably resembling F things. Each disjunct spells out a slightly different variant of resemblance EN. In the latter case, the fact that *a* resembles *b* is analysed in terms of *a* and *b* suitably resembling an appropriate paradigm case or cases or *a* and *b* being co-members of the relevant similarity class. In what follows, we will examine resemblance EN as a solution to the phenomenon of predication, since many of our

observations are relevant to resemblance as a phenomenon or a solution to predication. And while resemblance comes in degrees, we will focus our discussion on cases of exact similarity. In Chapter 3, we shall look at some additional issues regarding resemblance as a phenomenon in association with nominalism. Some of our observations there are relevant to EN.

Resemblance EN is clearly superior to class EN in its ability to justify the distinction between natural and unnatural classes, since the former offers a clear ground for natural classes, viz. resemblance among all and only members of the class. For the realist, cases of exact similarity where *a* exactly resembles *b* are cases where there is some respect of resemblance, F, such that *a* and *b* both exemplify F. Thus, realists claim that exact similarity can be reduced to an identity of universal which constitutes the respect of resemblance. Socrates and Plato are exactly similar in, say, being red since each exemplifies the very same property, redness. Resemblance EN proponents deny that exact similarity can be analysed in terms of identity of property and take exact similarity (and resemblance generally) to be a primitive, dyadic, internal relation that is symmetrical, transitive and, for some, reflexive.[8] Resemblance EN, as well as the other versions of EN, are what has been called a blob theory: while ordinary concrete particulars may be composed of separable parts, those particulars (and their parts, for that matter) are metaphysically structureless, undifferentiated wholes that, as a primitive fact, exactly resemble other such wholes.

Several objections have been raised against resemblance EN. For one thing, it suffers from certain forms of the companionship and imperfect community difficulties. The companionship difficulty arises when you have a possible world with co-extensive properties, which, contrary to resemblance EN are distinct (or cases of necessarily co-exemplified properties such as being triangular and being trilateral). Letting *g* and *s* stand for being green and being sticky, respectively, given a possible world with only three green sticky objects in it, we can form the class of these three objects as follows: $\{gs, gs, gs\}$. Now resemblance EN implies there is only one property here since there is only one class with objects that exactly resemble each other and only each other, but clearly being green is a property different from being sticky in spite of the fact that there are not two distinct classes.

Moreover, there is a different contribution that being green and being sticky make to the resemblances between the various pairs of these three particulars. The realist can bring this out by saying that they resemble each other in two respects, being green and being sticky, and these are properties each object has. But the resemblance EN, armed merely with a primitive exact similarity relation, cannot account for these different respects of resemblance. They might try to appeal to different paradigms – a green one and a sticky one – and claim that the three particulars resemble each. But this won't work because the EN proponent must specify how the green paradigm is to be used in the analysis, but it is not clear how this is to be done without making appeal to one being green and the other being sticky.

Alternatively, one might try to introduce two primitive predicates: green-resembles and sticky-resembles. But these appear to be contrived primitives. Why? Note that among the myriad of types of exact resemblances in the word, the resemblance EN must now introduce a new primitive for each. Now given a new case of exact resemblance, how are we to recognize the new primitive based on experience of past cases of resemblance since the new case is a completely new primitive? The realist does not face this problem. On their view, there is a pattern to all this. Each pair of exactly resembling particulars has a respect of resemblance such that it is a property identical in each member of the pair. Thus, each new resembling pair does not involve a new primitive; rather, it involved the identity relation and a new property. By contrast, the resemblance EN account not only seems contrived, it is uneconomical on two accounts: it multiplies primitives; and it has two primitive relations – identity and exact similarity – while realism has only identity. EN attempts to avoid this last point by reducing identity to exact similarity are highly counter-intuitive, since it seems obvious that the identity relation is a primitive metaphysical entity.

The imperfect community argument shows that a distinct class of exactly resembling particulars is not a sufficient condition for there being a distinct property. In a world with only these three objects in it, a red wooden thing (*rw*), a square wooden thing (*sw*), and a red square thing, one could form a class in which each member exactly resembles every other member and nothing else. In this

case, resemblance EN would imply that there is a property reducible to this class, but it seems pretty obvious that no such property exists.

In addition, exact resemblance to a paradigm or membership in a class of exactly resembling particulars cannot be equated with a property for another reason. It seems clearly possible that there be only one red thing in the world. If one objects that in this case, the red thing would have a host of separable parts that are themselves red things, so the conceived possible world is not possible, then it could be pointed out that even if we grant the infinite divisibility of a concrete particular – a questionable thesis in its own right – it seems clear that below some minimum extension, colour can no longer be exemplified. Thus, we can conceive a possible world in which the concrete particular has this minimum extension. Now this object is red but it stands in no exact similarity relation. The problem cannot be solved by appealing to red objects in other possible worlds, since this seems backward. It is because the object in question is red that it would exactly resemble these other possible objects if they were real, not vice versa.

There is a final objection to resemblance EN made famous by Bertrand Russell, Edmund Husserl and others.[9] It amounts to the claim that a vicious infinite relation regress is involved in resemblance EN.[10] Suppose we add another exactly resembling spot, Aristotle, to form a threesome with Socrates and Plato. Resemblance EN says that each is red in virtue of standing in *the* exact similarity relation to each other. Not this seems to be both a type of relation and the same relation multiply exemplified by each pair of relata. Thus it is a universal. To avoid this, one could say that there are three different exact similarity relations for each pair, but unfortunately, these three exact similarity relations all stand in *the* exact similarity relation to each other, and so on, to infinity. Not only is this an uneconomical situation, but at each stage of analysis there is a type, and thus the regress is vicious. The EN proponent cannot say that at each stage analysis the type is just a collection of tokens because that does not accurately capture the situation. Rather, at each stage, the collection of tokens is a collection of tokens of a new type, and thus type occurs at each level of analysis. The only way to avoid the regress is to admit at least one universal, viz. the exact resemblance relation.

Some philosophers, including realists Loux and Butchvarov, claim that while uneconomical, this regress is not, in fact, vicious.[11] To understand the issues, let us form a diagram using superscripts to stand for the level of being at which an entity exists and is related in the hierarchy and subscripts for the entities related within a level of being (Fig. 2.1.).

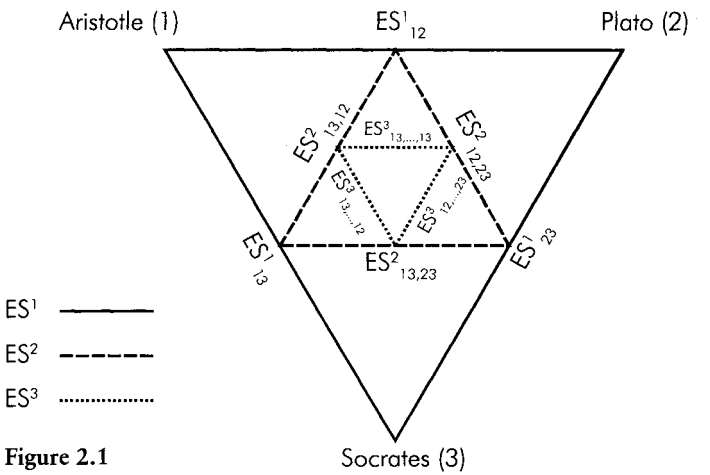

Figure 2.1

Loux and Butchvarov claim that the regress is epistemic/explanatory.[12] The EN advocate can give an account, can explain the fact that the three spots are all red by pointing out that they all stand in an exact similarity relation (ES) at level one. If asked, he can go on to account for the resemblances among these relations in terms of ES relations at level 2, and so on. Two features of this claim stand out.

First, Butchvarov notes that this regress is only a potential and not an actual infinite. Secondly, at each level in the hierarchy, the correct description of the entity in question treats it as complete without needing to include reference to the next highest level. This is often thought to be true of explanatory regresses in general. If x is explained in terms of y, then x is what it is with or without y. This can be seen from the fact that x would remain in tact if y', not y were the adopted explanation. One way to put this is to note that the need for y depends on x actually being a datum and, in general,

in explanatory regresses, the order of dependency runs from lower to higher levels in the hierarchy. A datum must be accepted *before* an explanation is required, that explanation must be accepted, before it requires explanation, and so forth.

Moreover, y can explain x even if we don't have an explanation for y. If we seek such an explanation in terms of z, then we treat y as a new datum which remains the same whether z or z' is adopted.

As an analogy, consider a chain of people borrowing a typewriter. Whether or not the chain is vicious depends on one's view of the correct description of entities at each level in the chain. Suppose a goes to b to borrow a typewriter and b complies, claiming to have just what a needs. If asked how b has a typewriter to loan, he claims to have borrowed it from c, who, having already borrowed one from d, has one to give to b. Allegedly, at each stage in the chain, the relevant entity can be described as "a possessor of a typewriter who can loan it to another". Thus, it is alleged, the regress is not vicious. The same point is being made regarding the resemblance regress.

Does this argument successfully rebut the claim that the resemblance regress is a vicious one? It does not. First, the regress depicted in the chart above is ontological, not epistemological. After all, the three spots exist, they actually stand in the first order ES relations, as do the first and higher order ES relations. There is nothing potential involved. Either the regress is actual and finite or it is actual and infinite. Clearly, it cannot be the former since that would require postulating at some level a triad of ES relations that either do not resemble each other, which is absurd, or that all stand in the *same* ES relation, which is a universal. Thus, the regress is an actual infinite.

Secondly, at each level in the ontological regress, the entity in question must exist and be self-identical to do the ontological work required of it. For example, given the reality of the three spots, at least part of what makes them the entities they are is that they are exactly similar to each other. There is no possible world in which they exist and are not exactly similar to each other. Thus, part of the description of each spot must include its exact similarity to the others and, on the EN analysis, this requires reference to the first level ES relations. "Aristotle is red" is incomplete and a more adequate description would be "Aristotle is a red spot that by nature stands in the relevant ES relations to Plato and Socrates".

The same point could be made about level one ES relations. They must exist or else the three spots could not exist since part of the nature of the latter is to be so related to each other. That is part of what it means to call ES an internal relation. Moreover, in order for level one ES relations to exist, then must be self-identical, and part of what makes them the entities they are is their exact similarity to each other; that is (on the EN view) their standing in the relevant ES relations at the next level. Thus, at each level, an entity is what it is (partly) in virtue of, in dependency on the entity at the next highest level.

Returning to the typewriter analogy, it is incomplete to describe each person as "a possessor of a typewriter who can loan it to another". Rather, each person is "a possessor of a typewriter who can loan it to another who first had to borrow it from another". At each level, the persons *qua* lenders depend on being a borrower from another and this means that, given the nature of the series, each level cannot be adequately described without reference to the next level.

Understood in this way, the typewriter regress and, more importantly, the resemblance regress is vicious because:

- entities at each level in the hierarchy are incomplete and require reference to entities at the next level to be adequately described so as to capture everything needed to make the entities self-identical;
- the dependency among members in the hierarchy is both transitive and runs from higher to lower levels in the hierarchy, not vice versa;
- an ontological traversal through the dependency hierarchy is a *per se* regress and it requires traversing an actual infinite analogous to counting from $-\aleph_0$ to 0. It seems, then, that the regress is vicious and resemblance EN must be rejected.

Abstract reference

Most would grant that the following sentences are true:

(2) Necessarily, red resembles orange more than it resembles blue.
(3) Necessarily, red is a colour.

The realist has a straightforward way of accounting for the truth of these sentences:

(2a) Necessarily, redness resembles orangeness more than it resembles blueness.
(3a) Necessarily, redness is a colour.

The realist claims that the terms "redness", "orangeness" and "blueness" are abstract singular terms; terms that in one way or another express or refer to a single, abstract universal, viz. redness, orangeness and blueness, respectively. Most realists explain the modality of (2) and (3) by reference to the *de re* necessity of the internal relations between and among the relevant universals which are themselves taken as necessary beings. The realist challenges EN proponents to provide alternative accounts of the truth of (2) and (3).

There are four different EN strategies for meeting this challenge. The first, and least plausible, is to agree that the relevant terms in these sentences are, indeed, abstract singular terms and to hold that they refer to the corresponding sets and not to universals. Thus, (2) becomes:

(2b) Necessarily, the set of all and only red things resembles the set of all and only orange things more than it does the set of all and only blue things.

It seems obvious that (2b) simply changes the subject. If sets exist, then they may resemble other sets in being sets, being abstract, having the same number of members and so forth. But sets are not coloured and one set cannot be brighter than another nor closer in colour to one set over against another. Thus, (2b) is not equivalent to (2).

In response, an EN could offer the following:

(2b′) Necessarily, the set of all and only red things and the set of all and only orange things are co-members in more natural sets than are the set of all and only red things and the set of all and only blue things.

Sentence (2b) failed because it replaced properties with sets but kept resemblance unaltered. Sentence (2b′) is more consistent, replacing

properties with sets and resemblance with set membership. But this move fails as well. For one thing, as (2a) makes explicit, (2) is clearly about colours and the way they resemble each other, and colour resemblance is just not the same as co-membership in sets. So even if (2) and (2b′) are materially equivalent, they do not capture the same states of affairs. Moreover, the notion of a natural set in (2b′) would suffer from problems raised above in our discussion of class EN.

Thirdly, consider a possible world in which all red and blue things also have the same shape, size, taste and weight while the orange objects have nothing resembling the red and blue ones except their colour. In this world, the set of all and only red things and all and only blue things would be co-members in more natural sets than the set of all and only red things and the set of all and only orange things, but redness would not resemble blueness more than it does orangeness. It could be responded that if we take into account the relevant sets throughout all possible worlds, this objection fails. But this is not clearly correct. The problem is that concrete particulars are complex in a way not true of properties. Thus, the former resemble each other in a larger number of ways than do the associated properties. For example, all red, orange and blue particulars are extended entities. So it is hard to tell just how many natural classes the set of relevant particulars share co-membership with throughout possible worlds, but it is not at all hard to tell that red resembles orange more than it does blue.

Finally, in taking sets to be the referents of abstract singular terms, this first EN strategy identifies properties with classes and this is false because necessarily co-exemplified properties (being triangular, being trilateral) or unexemplifiable properties (being a square circle and being a red taste) are not identical even though their membership sets are.

A second EN strategy is the exploded object theory. Focusing on (3), one gets

(3b) Necessarily, the exploded object composed of all and only red things is a coloured thing.

Does (3b) work? It fails for at least two reasons. First, granting that it is successful in those cases where the exploded object has the property possessed by each and every one of its parts (as in the case

of red), it won't work for properties where this is not the case. Consider the exploded object composed of all and only humans. Now, (3b′) is true:

(3b′) Necessarily, humankind is a substance-kind.

But the exploded object paraphrase (3b″) is false:

(3b″) Necessarily, the exploded object composed of all and only humans is a human thing.

Smith and Jones are human things but the exploded object they compose is not. Second, consider the scattered location, L, of all red things. In this case, everything red is L located, but redness is not L location. Moreover, necessarily, everything red is extended, shaped and located somewhere, but it is not true that, necessarily, redness is extension, being shaped or being located.

The third EN strategy employs a reductive paraphrase in which an abstract singular term (e.g. triangularity) is replace by what EN proponents call a concrete general term (e.g. being triangular), which, they claim, is a device for referring to the multiplicity of concrete particulars that satisfy the term. Thus, abstract singular terms really refer to a plurality of particulars, not to a single property. Sentence (2) now becomes

(2c) Necessarily, anything red resembles anything orange more than it resembles anything blue.

But (2c) is not equivalent to (2). It could be the case that some red things resemble some blue things more than they resemble orange things, since there are other respect besides colour in which particulars resemble each other. As a reply, (2c) could be replaced with the following:

(2c′) Necessarily, anything red color-resembles anything orange more than it color-resembles anything blue.

But (2c′) has been subjected to two criticisms. First, "colour-resembles" seems to be a fabricated predicate like "believes-that-the-cat-

is-on-the-mat", and not one that is really primitive as (2c′) would have it. "Colour-resembles" does not stand on its own. A whole variety of shapes, smells and other qualities will resemble one another as do red, orange and blue. But if (2c′) is correct, each of these cases of resemblance will require a new primitive predicate. But it seems clear that we understand the pattern that is common to all these predicates and this understanding is what permits us to form new resemblance predicates in new cases. And this ability is best explained by arguing that what is common to these predicates is resemblance and what is unique is the respect of resemblance. Thus, the best way to understand the predicate "colour-resembles" is to hold that when it is true that x colour-resembles y; this means that x and y resemble in being coloured as the realist claims.

Secondly, consider a possible world where these three pairs are co-extensive: "red" and "triangular", "orange" and "sweet", "blue" and "square". In this world, anything triangular colour-resembles anything sweet more than it does anything square. But it would not be the case that triangularity would resemble sweetness more than it does squareness. There is more to redness resembling orangeness more than it does blueness than what (2c′) captures and, thus, it is inadequate.

A final argument against the reductive paraphrase strategy was raised by Edmund Husserl.[13] His main point was that we are conscious of universals in acts that are different from those in which we are conscious of individual things. Thus, the ideal unity of the former cannot be reduced to the dispersed multiplicity of the latter. These acts have different intentional objects. Three features of the acts make this evident.

First, when one intends a group of red things, either at a single glance or in single acts of comparing each red thing to another, there is an implicit recognition of multiplicity and an act of comparison. One notices similarities. When one intends the universal redness, however, no such multiplicity is involved, nor is there a need for comparison. We intend the single entity, redness, in its unity. Thus, the two acts are essentially different because their objects are different.

Secondly, one never has before himself all the red things there are. So if redness is just the totality of all red things, then there is more one can learn about redness. On the other hand, when one

attends to the universal redness, one knows all of it because it is entirely present before him. There is nothing essential to it that is left out and that can be known only by seeing and comparing other red things to the one currently present.

Finally, when redness is construed as a multiplicity, the question arises as to what unifies the diverse particulars. But no such question arises when one's intentional object is the universal redness. For these three reasons, Husserl argued that the reductive paraphrase fails.

The fourth EN strategy is a metalinguistic one most effectively advanced by Wilfrid Sellars.[14] On this view, sentences with abstract referring devices are metalinguistic; that is, they do not refer to nonlinguistic objects (e.g. sets, exploded objects, properties, multiplicities of concrete particulars). Rather, they are covert ways of making claims about the words we use to talk about nonlinguistic objects.

To probe more deeply, let us distinguish an abstract singular term that, prima facie, appears to refer to a single abstract object, and a concrete general term that, extreme nominalists claim, is a way of referring to the concrete particulars that satisfy the term. Examples are, respectively, "wisdom"/"wise", "triangularity"/"triangular", "humankind"/"human". Now, as a first approximation, we can understand the metalinguistic view to imply that sentences with abstract singular terms turn out to be making claims about the corresponding general terms. For example,

(4) Wisdom is a virtue.

is reduced to

(4a) "Wise" is a virtue predicate.

So far, the metalinguistic view under consideration is not well developed and, as it stands, suffers from at least two obvious criticisms. First, it falls victim to the object and relation regresses. The metalinguistic analysans (4a) offered for (4) explicitly contains a word type ("wise") and implicitly entails that various objects (Moses, Aristotle) and predicate tokens of "wise" enter into *the* satisfaction relation (is true of relation, etc.). In a way that should now be familiar, it can be argued that two vicious infinite regresses are generated.

Secondly, this analysis of (4) asserts that it actually makes a claim about the English word (or tokens of the word) "wise". Now, when a speaker of other languages utters the equivalent of (4a), they are clearly not talking about the English word "wise". Thus, the corresponding foreign language utterances are all completely different from each other and from (4a), but this won't do since they are all legitimate, equivalent translations of (4).

Sellars has offered a sophisticated version of the metalinguistic approach that, he claims, does not fall prey to these two problems. Regarding problem one, Sellars says that abstract singular terms ("wisdom") may, indeed, be replaced with their associated general terms ("wise"), but the latter should be taken as equivalent to the expression "the word '_____'"; for example, "the word 'wise'". These expressions, he indicates, are distributive singular terms, that is devices for signalling that a claim is being made about the various individual tokens of the relevant word. So (4) is neither a claim about wisdom nor the word type "wise"; rather, it is a general claim about all the relevant token utterances and inscriptions, the "wise"s.

Sellars also purports to have a way out of the second difficulty. Instead of ending up with a language bound analysis of abstract reference, he asserts that a proper analysis requires recognizing linguistic expressions that are functionally equivalent across various languages; for example, terms such as "man", "homme", "Mensch", "hombre", that are subject to the same linguistic rules, express the same behavioural responses to perceptual situations, enter into the same inferential patterns, etc. Sellars adopts a special form of quotation – dot quotation – to capture these cross linguistic commonalities. For example, the dot quote term "·T·" is a metalinguistic common noun which is true of all the tokens of all the various functionally equivalent linguistic expressions in different languages. Thus, (4a) becomes

(4b) ·Wise· is a virtue predicate.

or, more accurately,

(4c) ·Wise·s (i.e. all tokens of ·wise·) are virtue predicates.

What should we make of Sellars' account of abstract reference? First, (4c) changes the subject since, prima facie, (4) is about objects

in the world and the features they have. Sentence (4) can be verified as true by simply inspecting the relevant entities, but (4c) is about multiplicities of linguistic entities and practices. Sentence (4) would be true even if there were no language users but not so with (4c), and if possible predicates are employed to rebut this point, the realist will argue that (4) provides the ground for the appropriateness of the application of possible predicates, not vice versa. Moreover, the arguments from Husserl mentioned above could be applied to Sellars' position.

Finally, it is necessarily the case that (4) is true, but this is not so with (4c). No specific set of functionally equivalent predicate tokens had to be about wisdom and, indeed, it is conceivable that language could have evolved with no predicates for wisdom whatever. If it is responded that in this case we would not be dealing with expressions that are functionally equivalent to the English "wise", then the realist will want to know on what basis a given predicate is or is not functionally equivalent to "wise". The realist says the answer lies in the fact that predicates do or do not involve expressing or referring to the same property, but this move is not available given EN. If an EN advocate responds that the basis is whether or not the predicate expresses the same linguistic pattern, this just renames the problem, for the realist will claim that sameness of linguistic pattern in the cases under examination are, ultimately, grounded in sameness of properties involved.

This insight leads to a second area of difficulty, viz. Sellars's view leads to a vicious object and relation regress. According to Sellars, dot quote terms are true of all tokens of the various functionally equivalent expressions in different languages. In a way that should be familiar, dot quote terms and Sellars's notion of *the* expression "the word '____'" are types and, thus, they seem to generate an object regress. Moreover, the various linguistic tokens of a dot quoted term and its associated concrete particular stand as a pair in a certain *type* of relation, viz. the *true of* or *satisfaction* relation, and, thus, a relation regress would seem to follow.

In response, Sellars could deny that the dot quote terms in his analysans are word types; rather, they are just distributive singular terms that refer to the various individual tokens of the relevant words. But which tokens? The answer is all and only the ones with *the same* linguistic function. Now here, again, we have a type in the

analysans. One suspects that any attempt to reduce "the same linguistic function" to distributive expressions about various tokens of linguistic behaviours would face the same problem, for these token behaviours would count only if they were of the proper *kind*.

Finally, even if Sellars's account works for sentences with abstract singular terms such as

(5) Wisdom is a property.

it would seem to run into difficulty with sentences that employ definite descriptions to refer to properties. For example,

(6) The attribute most frequently attributed to Aristotle is a property.

Prima facie, (6) makes reference to a property – wisdom – every bit as much as does "wisdom" in (4). How would Sellars account for (6)? He may try

(6a) ·The attribute most frequently as ascribed to Aristotle·s are adjectives.

Sentence (6a) parallels (4c) above. But (6a) is false since ·the attribute most frequently as ascribed to Aristotle· is a noun phrase, not an adjective, since it occupies the subject position of (6a). Sellars could respond that ·the attribute most frequently as ascribed to Aristotle· is just a proxy for "·wise·"; that is it is a way of talking about another term, ·wise·, which is most frequently ascribed to Aristotle and ·wise· itself is a distributive singular term for linguistic tokens functionally equivalent to the English "wise", and these are, in fact, adjectives. So (6b) is the correct reading of (6):

(6b) The general term most frequently ascribed to Aristotle, namely, ·wise· is an adjective.

But now (6b) is not equivalent to (6) because they have different truth conditions. Sentence (6) could be true and (6b) false in possible worlds where wisdom is the property most frequently ascribed

to Aristotle, but the various linguistic equivalents for the adjective "wise" are not the most frequently used terms because people in those worlds more often use definite descriptions and not abstract singular terms to refer to wisdom.

Sellars could respond by claiming that whenever a definite description is used that is functionally equivalent to an abstract singular term, then the former is identical to the latter. But this just seems false. As linguistic inscriptions/utterances, they are clearly different objects. Further, arguably, abstract singular terms are rigid designators that name their respective objects and definite descriptions are nonrigid designators that refer to whatever satisfies them. Thus, there is no reason to think that, say, "wisdom" and "the general term most frequently ascribed to Aristotle" are coextensive, much less identical in any or throughout all possible worlds unless, of course, one makes a covert appeal to sameness of referent, the property of being wise, say, throughout possible worlds to guarantee the result. In the end, the claim that an associated abstract singular term and definite description are identical or even materially equivalent appears to be a mere assertion without adequate justification. It would seem, then, that the metalinguistic strategy, no less than the others just examined, fails to provide EN with an adequate analysis of abstract reference and the extra-linguistic states of affairs associated with it.

Summary

The case against EN, of which the considerations in this chapter are an important part, have seemed persuasive to many philosophers and EN has not been widely embraced throughout the history of reflection on universals. This should not be surprising. If one simply attends to Socrates, it becomes evident that the redness, circularity, size and other features of Socrates are neither identical to each other nor to Socrates as a whole, yet they are real features, that is to say, properties. Does this mean that realism is correct? No, it does not, because moderate nominalism is an attempt to embrace the existence of properties while eschewing universals. In Chapter 3, moderate nominalism will occupy our attention.

3 Moderate nominalism and properties

In Chapter 2, reasons were given for thinking that extreme nominalism is an inadequate view of properties. However, even if this is correct, it would be premature to conclude that properties are universals because moderate nominalism – the view that properties exist and are abstract particulars – is a live option. On this view, Socrates and Plato each has its own redness, red_1 and red_2, respectively, and red_1 and red_2 are individualized properties. In this century, the three most prominent moderate nominalists have been G. F. Stout, D. C. Williams and Keith Campbell. Rather than analysing moderate nominalist treatments of predication, resemblance and abstract reference in topical fashion, it will be more useful to approach moderate nominalism by stating and evaluating the positions of its major advocates. Stout's moderate nominalism will be mentioned only briefly because although it is an important and distinctive version of moderate nominalism it has not been particularly influential, at least not in its idiosyncratic features. Williams's moderate nominalism has been appropriated, clarified and expanded by Keith Campbell, who is, arguably, the most articulate advocate of moderate nominalism. Thus, Williams's views will not be examined directly and will be mentioned only when it is helpful in clarifying the exposition of Campbell. In what follows, Stout's moderate nominalist will be investigated, followed by a detailed treatment of Campbell's position. Along the way, issues in predication, resemblance and abstract reference will be central to the dialogue.

The moderate nominalism of G. F. Stout

G. F. Stout's view of properties is the moderate nominalist counterpart to class EN except, of course, the members of Stout's classes are abstract and not concrete particulars.[1] According to Stout, the "universal" redness is not a single indivisible quality, numerically the same in each red thing. Rather, it is a class of abstract particulars understood as simple entities that can occur only at one point in space at a given time. By "simple" Stout meant basic or non-complex. An abstract particular is not itself a complex of more basic entities. It is, perhaps, *the* central defining feature of moderate nominalism that it requires property-instances to be simples. This will become more evident later when we examine Campbell's notion of a trope. But for now, Stout's assertion regarding the simplicity of abstract particulars provides a fitting occasion to make an important point: to the degree that a realist accepts property-instances in addition to universals and concrete particulars, the realist must assay them as complex entities to avoid the charge that his/her ontology is actually a moderate nominalist one.

Returning to Stout, each abstract particular in the class "redness" exactly resembles each other abstract particular in the class and there is nothing outside the class that exactly resembles each member in the class. Thus, redness is a class of abstract particulars or little reds that stand to one another in the relationship of exact resemblance.

Two important points should be noted. First, the members of the class "redness" are not red *things* like red balls or lollipops, but are abstract particulars or reds. Secondly, Stout argues that the unity of the class of reds is not to be explained by their exact similarity to one another. Rather, exact resemblance is grounded in a *fundamentum relationis*, the distributive unity of the class.[2] To elaborate, a relation between two entities presupposes a complex unity into which both entities and the relation are combined. For example, consider two concrete particulars *a* and *b* existing in the relation *above and below*. In this view, this state of affairs presupposes a spatial complex in which *a* and *b* exist in that specific relationship. This spatial complex is a complex unity and is the *fundamentum relationis* of the spatial relation *above and below*. Likewise, with regard to resembling abstract particulars, the complex unity that is the *fundamentum relationis* of this resemblance is the distributive unity of the class. In

a way similar to class EN, this distributive unity is ultimate and cannot be analysed. Moreover, abstract nouns like "redness" are not singular terms for Stout but general terms. "Redness" refers distributively to a class of reds that are exactly alike and this resemblance is grounded in the distributive unity of the class.[3]

Stout's moderate nominalism will not be criticized in much detail. For one thing, in a number of areas, he is in agreement with Keith Campbell and D. C. Williams, and the bulk of this chapter will be devoted to Campbell's moderate nominalism. Moreover, it is not necessary to go into any great detail to refute the idiosyncrasies of Stout's position, particularly his view of the distributive unity of the class. No one in recent times has held this view. Even in Stout's own day, philosophers who generally agreed with his total position on universals did not usually go along with Stout on this point.[4] The fact that few philosophers have followed Stout here is not sufficient to rule out his view, but it does make his position less interesting unless there are strong arguments for it, and Stout did not offer strong arguments. He simply tried to refute the idea that the unity of a class of abstract particulars can be adequately grounded in a relation of exact resemblance and then went on to assert his position.

Before turning to Campbell's moderate nominalism, three further points should be made. First, the distributive unity of a class for Stout has both an intension and extension. On this score, it is hard to see how Stout's position differs from a realist one, for he seems to have implied that the distributive unity, intension or nature of the universal is something each member *has*. At the very least, Stout was not as clear on this point as one would have wished. Secondly, as D. M. Armstrong says,

> the notion of a distributive unity seems to be a restatement of Stout's problem rather than a solution of it. It is a way of saying that the members of certain classes of particulars are many, but at the same time one, while failing to express what that oneness is.[5]

Armstrong seems correct. Stout's "solution" is little better than a restatement of the problem. Finally, Stout's position is almost identical to Campbell's in the sense that the most persuasive aspects of Stout's moderate nominalism are part of Campbell's ontology as well.

The moderate nominalism of Keith Campbell

The most articulate version of moderate nominalism currently available is the trope nominalism of Keith Campbell.[6] Campbell's moderate nominalism has evolved over the years and it is possible to distinguish an early and late version of his thought. With this in mind, Campbell's early moderate nominalism will be described and critiqued. This will provide clarity on the features of his early ontology he took to be in need of repair. The section will close with an evaluation of his later, mature form of moderate nominalism.

Campbell's early version of moderate nominalism

According to the early Campbell, the proper way to assay "Socrates is red" is this: the simple trope (Campbell's term for an abstract particular), red_1, which is a member of the similarity set "redness", is a part of the whole, Socrates, and Socrates is a bundle of compresent tropes.[7] This assay contains at least four key elements that made up Campbell's earlier position: the nature of a trope, the nature of a "universal", the relationship between a trope and its "universal" and the relation between a trope and a concrete particular that has it.

In Campbell's earlier writings, a trope was taken to be an abstract particular. By "particular" he meant an entity that is exhausted in one embodiment; by "abstract" Campbell meant an item that is got before the mind by an act of abstraction, that is, by concentrating attention on some, but not all, of what is presented. In this way, Campbell follows the moderate nominalist tendency of treating "abstract" as an epistemic, and not ontological, notion. Examples of tropes are the specific, numerically singular taste of a lollipop, or its specific colour, shape, and so on.

Further, tropes are basic, primitive entities. Campbell says of a trope, "It embraces no variety at all".[8] Again, "They are *infimae species*, taken as particulars".[9] In another place he says, "They are in Hume's sense substances, and indeed resemble his impressions, conceived realistically rather than idealistically".[10]

On this view, a trope, construed as a basic particular, is simple, fundamental and independent. By "simple" is meant that they have no further real parts (ones that can be separated from the whole in reality and not merely in thought). The notion of being fundamen-

tal is explained in this way. Entity A is fundamental relative to entity B if B's existence depends on A but not vice versa. Finally, "independence" means that an entity is truly independent if it could be the only entity in the universe. Tropes (at least non-emergent ones), then, are basic particulars. Concrete particulars like Socrates are derivative and it is a contingent fact that tropes usually come grouped together as concrete particulars.

An additional, important feature of tropes on Campbell's earlier view was the central role that space (or space-time) played in spelling out what a trope is. First of all, tropes do not exclude one another from being at the same place. In fact, a concrete particular is just a "clump" of compresent tropes at a place. Secondly, a trope exists at one definite location; it is a quality-at-a-place. Campbell claimed that this should not be taken to imply that a trope has two different constituents, viz. its qualitative nature (which is a universal) and its place (which is particular). A quality-at-a-place is a single, particular reality.

This is clarified by Campbell's view of the special status of the geometric figures of an entity; its form and volume. Form and volume are special tropes not like any others. Their presence in a particular compresent sum of tropes is not contingent; tropes cannot be present except by being in a formed volume. Tropes are, therefore, essentially regional. Wherever a trope is, there is formed volume. On the other hand, Campbell asserted that shape and size are not found except in company with characteristics. So formed volume is both essential to ordinary tropes and in itself insufficient to count as a proper being. Since the shape and size of a trope are inseparable from its color, then the former are not really different entities from the latter. Inseparable entities appear to be identical for Campbell; they differ only by a distinction of reason (when A and B differ by a mere distinction of reason, then A is identical to B). Put differently, the place (located, formed volume) and qualitative nature of a trope are identical and differ only as different ways of thinking of or speaking about the trope.

So much, then, for tropes. For Campbell, the relationship between Socrates and all the tropes "in" Socrates is a part/whole relation. Each trope is part of a bundle of compresent tropes that is Socrates. Thus the predication relation is reduced to a type of part/whole relation in Campbell's moderate nominalism.

The "universal" redness is merely a set of exactly resembling tropes; for example, red_1 (in Socrates), red_2 (in Plato), and so on. In this way, Campbell's moderate nominalism may be seen as a counterpart to resemblance EN. In Campbell's earlier writings the relationship between each trope and its corresponding "universal" is clear and straightforward: it is the $\in$ of set membership. However, when we turn to an analysis of the exact similarity relation that obtains between or among tropes in a set, things are not so clear. In fact, the early Campbell's treatment of similarity is easily the weakest part of his version of moderate nominalism. Space considerations require that we limit ourselves to making some general observations relevant to our current discussion.[11] One thing that is clear is that the unity of a set of tropes is grounded in the exact similarity relation. And the exact similarity relation is like the relation of identity in that it is symmetrical, transitive and, arguably, reflexive.

On the other hand, it is not clear whether in Campbell's earlier views of exact similarity he saw it as an internal or external relation and he appears to have equivocated between the two views. To see this, we need to recall two things true of internal relations as they are usually construed. First, if the R of *a* to *b* is internal to *a*, then anything that does not stand in R to *b* is not identical to *a*. Secondly, internal relations are not primitive but, rather, are derived subsistences grounded in the natures of the entities they connect. As Gustav Bergmann put it,

> The ontological ground of an internal connection lies wholly "in" the two or more entities it connects. More precisely, it lies in their natures. The notion is so crucial that I reword it. *The ontological ground of an internal connection is the natures of the entities it connects and nothing else.* Still differently, an internal connection has no ontological ground of its own . . .[12]

More recently, D. M. Armstrong has defined an internal relation as a relation that is logically determined by the nature of the related terms.[13] Armstrong goes on to point out that we can explain why internal relations are such that given two internally related entities *a* and *b*, there is no possible world in which the objects remain unaltered but in which the internal relation fails to obtain by recognizing that internal relations are derived from and grounded in the

natures of the entities so related.[14] Since internal relations are ontologically grounded in the more basic metaphysical natures of the related entities, internal relations are derived subsistents, not primitive entities.

Now Campbell explicitly patterns his version of moderate nominalism after that of D. C. Williams and Williams clearly held that exact similarity between two tropes is an internal relation.[15] Moreover, Campbell says,

> Can't we ask about two white tropes, no less than about two white things, what it is that gives them their resemblance? Perhaps we can answer legitimately just that they resemble each other because of what they are like, or because of their character or nature. Perhaps if we quantify over tropes we will have a cause to quantify over universals as well. But I for one have no confidence either way.[16]

In this passage Campbell does not clearly reject the internal relation view. But for three reasons, this interpretation should be rejected. For one thing, in the passage just cited, Campbell grasps the fact that an admission that exact similarity is an internal relation makes it hard to avoid universals as the ground for exact similarity, and his entire system is meant to be an alternative to realism about properties. Secondly, elsewhere Campbell explicitly states that the relation of exact similarity is an unanalysable, primitive, brute fact and this can only mean that the relation is an external one.[17] Finally, although Campbell claims that an anti-naturalist could embrace moderate nominalism (e.g. by accepting the existence of mental tropes), nevertheless, he clearly wishes to advocate moderate nominalism as a way of allowing the existence of qualities within the confines of a naturalist stance. And as D. M. Armstrong has pointed out, naturalists, if they are self-reflective and consistent, should eschew treating internal relations as real entities.[18] I do not wish to defend Armstrong on this point, although I think he is right. Suffice it to say that if internal relations should be eschewed by a naturalist, then since Campbell wishes his ontology to be an expression of naturalism, he should avoid treating exact similarity as an internal relation. And it is charitable to interpret him in this way.

Before leaving the topic of exact similarity, it should be pointed out that, at present, Campbell sees exact similarity as an internal relation.[19] It is important to note that Campbell's earlier confusion here, his change of position and problems in his current treatment of exact similarity are rooted in a tension endemic to moderate nominalism: (basic) tropes are simple entities – particularized natures – and there is a mere distinction of reason between either a trope's nature and location (or formed volume) or its nature and particularity. Thus, when one thinks about the fact that two red tropes are red, it is easy to see how their resemblance could be grounded in their colour. But such a temptation does not arise if we think of two resembling tropes as merely located entities (or particulars). The relation of similarity between the "natures" of two red tropes is an internal one, but the relation between the location or particularity of those tropes is external. But how can this be if the nature and particularity of a trope differ by a distinction of reason and thus, are identical? This tension need be probed no further except simply to point out that Campbell's use of a distinction of reason here obscures his views and causes him to be inconsistent.

These remarks about exact similarity have made reference to the notion of a distinction of reason and this, along with other distinctions, is crucial for understanding the problems with moderate nominalism. Therefore, it may be helpful to review three important distinctions mentioned in Chapter 1. The first distinction is the real distinction. This consists in the fact that two entities, A and B (e.g. a chair and a desk), are not identical and can exist as independent entities in separation from each other. The second major distinction is the distinction of reason. This is a purely mental distinction that does not actually intervene between the entities designated as distinct, as they exist in themselves, but only as they are distinguished in thought. There are two types of distinctions of reason. First, there is the distinction of reasoning reason (*distinctio rationis ratiocinantis*). This has no foundation in reality and arises exclusively from the temporal activity of the process of thought. For example, we distinguish Peter from himself in referring to him twice when we say "Peter is Peter". Secondly, there is the distinction of reasoned reason (*distinctio rationis ratiocinatae*). This distinction arises from an inadequate conception by the mind of the object. Assuming that God is a simple entity, an example here

would be the distinction between God's mercy and justice. The key thing about any distinction of reason is this: *If A and B differ by a distinction of reason (of either type), then A is identical to B.*

There is a third distinction that occupies a middle ground between the first two. This distinction is an actual one found in nature prior to any activity of the mind but it is not as great as the real distinction between two separable entities. The modal distinction intervenes between an entity and its mode; for example, the modal distinction obtains between the property known as quantity and the-inherence-of-quantity-in-a-specific-substance. A mode is a dependent, inseparable, genuinely distinct entity from what it is a mode of. If a modal distinction obtains between two entities A and B (where B is a mode), there is non-identity between A and B and inseparability in this sense: A can exist without B, but not vice versa.

With this in mind, we are in a position to understand three puzzles that are problematic for Campbell's earlier views. Indeed, Campbell saw these puzzles in earlier critiques of his moderate nominalism and admitted that they were decisive against his early position.[20] Consider a concrete particular, say, an apple. The taste trope and colour trope of the apple, indeed all the apple's tropes, are at the same place since the apple is merely a bundle of compresent tropes. Now the nature of the taste trope differs from its location/formed volume by a distinction of reason only. Likewise, with the colour trope and all the others. But then, the taste of the apple is identical to its place as are all the other tropes in the bundle. Now by the transitivity of identity, all the tropes of the apple are identical to each other and, indeed, the apple is reduced to a bare location. Concrete and abstract particulars turn out to be bare simples and this is incoherent. This is puzzle one.

To understand puzzle two consider two compresent bundles of tropes, A and B. Bundle A includes a red trope and a taste trope at the same location. Bundle B includes a blue trope and a taste trope from the same exact similarity set as the taste trope in bundle A. In other words, the concrete particulars A and B differ in colour but have the "same" taste. Now, the red trope of A is in a set of other red tropes exactly similar to it. Since the red trope's "redness" is identical to its place/formed volume (they differ merely by a distinction of reason) and since the nature of A's taste trope is also identical to the same place, A's red trope (by the transitivity of

identity) is identical to A's taste trope. The same is true of B's taste trope and blue trope. Furthermore, A's taste trope is in the same exact similarity set as B's taste trope. But this means that A's red trope and B's blue trope are in the same similarity set of taste tropes. And since exact similarity is transitive, B's blue trope will be in the similarity set of red tropes exactly like A's redness. If this is true, it is hard to make sense out of the idea of a similarity set based on a trope's nature. If an exact similarity set of red tropes includes a blue trope, the very idea of an exact similarity set of red tropes becomes vacuous.

The third puzzle is this. According to the early trope view, tropes are basic, independent existents and concrete particulars are derivative bundles of tropes. It is a purely contingent matter that a given trope is in a given bundle. The trope could have existed in another bundle of tropes or without being in any bundle at all. Now, a trope cannot exist if it is not individuated. But since place is the principle of individuation, this means that a given trope could not have existed at another place since that would make it a different trope. This same point holds for all the tropes at a given location, which together form a compresent bundle. But then, it is not a contingent fact that these particular tropes combine to form a specific concrete particular, because in order that these tropes be *these* tropes, they must be at a given location. It is a matter of necessity that a concrete particular have just the tropes it does. In fact, the concrete particular is identical to the bundle of tropes, and, therefore, to each trope. And since the concrete particular is identical to each trope, it is identical to a mere place.

It is important to see just what is going on in these puzzles. The trope view must assay a basic trope as a simple in order to avoid assigning the individuating and qualitative roles to non-identical constituents in the quality-instance, for this is what realists do (e.g. red_1 has an individuator, say, a bare particular expressed by 1, the universal redness, and a tie of predication). Since tropes are simples and since place/formed volume is identical to a trope's nature (differing by a distinction of reason only), then the trope nominalist must either remove the 1 and make the identity reflect the entity redness or else remove redness and make the identity reduce to bare location. The former collapses into realism and the latter is incoherent as the puzzles indicate.[21]

Campbell's revised version of moderate nominalism

In light of these and other criticisms, Campbell has modified his trope nominalism.[22] Two aspects of his current thinking are especially relevant to our present concerns: his assay of a trope, especially the role of location in that assay; and his clarification of the relation of exact similarity. As moderate nominalism would seem to require, he continues to hold that a basic trope like red_1 is a simple entity – a particularized nature that as a matter of brute, unanalysable fact sustains two roles: to be a particularized nature that is exactly similar in nature to other tropes in its similarity set and that is individuated from all other tropes. A basic trope is not a union of a particularizing entity and a particularizer. It is a single, simple item – a particularized nature. Campbell is not entirely clear about the distinction between the nature and particularity of a specific trope.[23] On the one hand, he seems to continue to hold that the difference is just a distinction of reason since the nature and particularity of a trope do not constitute a genuine duality of entities, which would turn tropes into complex entities. On the other hand, he says that the distinction between the nature and particularity of a basic trope is, perhaps, the formal distinction of Duns Scotus and, for Campbell, this amounts to the level of abstraction at which an entity is being considered (either as a particular or as a qualitative nature).

For two reasons it seems that Campbell's mention of the formal distinction really amounts to a reassertion of a distinction of reason in different terms. First, Suárez summarizes the medieval discussion of Scotus's formal distinction, correctly in my view, as being somewhat confused and hard to understand. But, nevertheless, based on the remarks of Scotus himself and his disciples, Suárez claims that the formal distinction turns out the be the distinction of reasoned reason.[24] Secondly, Campbell's own clarification of his use of the formal distinction reduces it to a distinction of reason since, for him, the distinction is an epistemological one only and identity obtains between the entity singled out differently.

Campbell goes on to say that a trope is not individuated by place. As a matter of a posteriori Kripkean necessity, tropes are located, but the location of a trope is a quasi-trope (roughly, a mere appearance or pseudo-entity that is part of the manifest world – more on this latter), and as a matter of necessity is always

connected to a trope (it is contingent at which place a trope is located but not that it be located):

> let us abandon the view that a colour trope is individuated by its place. Take *compresence* as a more abstract, more formal matter, recognize that a colour trope and a spatial quasi-trope are distinct entities and assay the presence of green at a place as the compresence of a green trope with a place one.[25]

I have not been able to tell what distinction Campbell sees between a trope's formed volume and its place. But regarding formed volume, he says that it is also a quasi-trope, a sub-region of space whose boundaries are fixed by the presence of the trope's nature (e.g. colour), that is not identical to the qualitative content within that formed volume.

So much, then, for Campbell's new view of tropes. It was noted above that he has tried to clarify his view of exact similarity. In most places he says that this is an internal relation grounded in and supervenient upon the natures of the resembling tropes.[26] However, in other places he says that the exact similarity between two tropes is an ultimate, basic, unanalysable, primitive fact.[27] There are at least two problems with these claims. First, Campbell is committed to the idea that causal power is the mark of being.[28] Now it is not at all clear what the ontological status is for supervenient entities in Campbell's ontology since they do not appear to have causal power. Jaegwon Kim has pointed out that for those with this metaphysical commitment, "To render mental events causally impotent is as good as banishing them from our ontology".[29] Kim's remark applies to Campbell's assay of exact similarity if that assay takes the relation to be a supervenient one. And Campbell himself admits that supervenient facts are mere pseudo-additions to our ontology in which no new being is involved.[30]

Secondly, if exact similarity is primitive, then no further analysis can be given either of the relation itself or of the fact that it obtains. But if the relation is internal, it is not primitive, not in the sense that the relation must now be reduced to identity – a reduction that realists accept but that Campbell is free to deny – but in the sense that exact similarity is grounded in the natures of the resembling tropes. As will be shown below, once the need for a ground is

admitted, difficulties follow that do not arise if such a need is denied. There are other interesting features of Campbell's moderate nominalism, but rather than examine those features, it will suffice if we can see what is wrong with these two fundamental aspects of his, or for that matter, any version of moderate nominalism.

The first set of remarks target Campbell's new assay of a basic trope, starting with his claim that the new role that location or formed volume plays in his refurbished moderate nominalism avoid problems that plagued his earlier position. Note, first, that since a realist assay of a quality-instance treats it as a complex entity with its nature being a universal predicatively tied to an individuator (for more on this, see Chapter 5), to avoid realism Campbell must hold that a basic trope is simple and this is where the main problems with moderate nominalism lie.

Apparently, Campbell fails to recognize that these problems turn on the simplicity of a trope and not on the role of location/formed volume in a trope's assay. In fact, Campbell's new view of the role of location/formed volume makes his moderate nominalism less available to the naturalist than was his former position and Campbell is clearly concerned to present his trope nominalism as an attractive option for a naturalist ontology.

Why is his new position more problematic for a naturalist? While it would be difficult to define contemporary philosophical naturalism to everyone's satisfaction, a widely accepted understanding of a naturalist ontological commitment is that the spatio-temporal universe of strictly physical entities that constitute the appropriate objects of natural scientific study is all there is. Campbell accepts this understanding of naturalism at least in the sense that he understands naturalism to require all entities to be spatiotemporal. In his earlier view, it was easy to see why tropes could be viewed as natural entities that are entirely within the spatiotemporal world of natural entities. But the current picture of the role of location/formed volume actually comes perilously close to turning tropes into traditional abstract (non-spatiotemporal) entities or Platonic abstract perfect particulars with the proviso that they must be exemplified by a spatiotemporal particular to exist.

As we shall see in Chapters 4 and 5, for the traditional view of properties as abstract entities, properties are "in" the particulars

that exemplify them, but they are not themselves spatiotemporally located at the place of those particulars. Nor is the way they are "in" those particulars a spatial relation; rather, it is the primitive nexus of exemplification. Redness is (non-spatiotemporally, predicatively) in a ball and the ball is on the table, but neither redness nor exemplification are natural, spatiotemporal entities. It is widely recognized that when a universal is exemplified by a particular, the resulting state of affairs (the having of the universal by the particular) is itself a particular. This has been called the victory of particularity. Now in the same way there is a victory of spatiotemporality. When a ball is red, the ball is spatiotemporally located as is the state of affair consisting in the-having-of-redness-by-the-ball. But neither redness nor exemplification is spatiotemporal. If one were to add the Aristotelian constraint that properties must be exemplified in order to exist, the result would rule out transcendental (unexemplified) universals, but it would not turn exemplification or exemplified properties into spatiotemporal, natural entities. They would still be abstract objects.

Now Campbell's current views seem to parallel this picture precisely. A trope's nature is a metaphysically complete entity ontologically prior to its tie to the quasi-trope of location, formed volume since the nature is not identical to the location and neither enters into the being of the other in a part/whole way. This means that the trope's nature itself is not spatial but receives spatiality from its tie to the quasi-trope of location/formed volume. Nor is it clear that this tie is spatial since it connects a nature to a location. Now how is this different from the victory of spatiotemporality in the traditional realist view? The only difference is that a trope can be embodied only in one place. But not only is it now difficult to see why this is the case – if natures are identical to locations it is easy to see this, but since spatiotemporality is not inherent in their being, but rather, tied to them, it is less clear and more ad hoc to say such a tie can occur only once – it is also hard to see how a naturalist could appropriate such an analytic ontology into their world view. And even if we grant that a nature can be tied to space in one embodiment only, tropes turn out to be perfect particulars on one interpretation of Plato, and such entities were still non-natural abstract entities, as was the tie that Plato claimed connects them to particulars in the space–time world.

Secondly, the simplicity of a basic trope in Campbell's refurbished moderate nominalism generates the same metaphysical difficulties that he admits were telling against his earlier position. Consider two red tropes. *Qua* red entities they stand to each other in an internal exact similarity relation grounded in their natures. But *qua* particulars they are spatially related to each other in external primitive spatial relation. But the particularity and nature of a trope are identical to each other (they differ by a mere distinction of reason). It follows from this that the two simple entities stand to each other in internal and external relations due to the same metaphysical features of the relata. But how can this be? Further, by the transitivity of identity, the particularities of the two tropes stand in an internal exact similarity relation to each other and the two red natures are externally related to each other. But this seems unintelligible.

Moreover, since the nature and particularity of a trope are identical to each other, the same dilemma of simplicity presents itself to Campbell: either tropes are reduced to properties as universals or to bare particulars. This dilemma is a matter of ontology, not epistemology. The nominalist tendency of focusing on epistemic and not straightforwardly ontological issues, or of reducing the former to the latter, e.g. the use of the epistemic notions of the distinction of reason, abstraction and different modes of counting, obscure the real metaphysical problems involved here. Campbell's shift from using the distinction of reason between a trope's nature and location to using it between that nature and particularity does not solve the problem, which centres primarily on the simplicity of tropes and not the special role of place in their assay. And as we have already seen, his new view of place is less not more compatible with the naturalist stance.

Someone may respond that a similar problem can be raised against universals. A universal has a nature (what it is, e.g. redness for the universal red) and universality. If a trope's nature and particularity are identical for a trope, then the nature and universality of a universal are identical. Thus, red and green would be different by nature but identical by universality, which is incoherent. This response against the realist does not work. The realist need not take redness and greenness as simples. Therefore, if a realist grounds the universality of redness and greenness in a property possessed by

both – being universal – he can distinguish this property from the natures of red and green. But the same option is not available to the trope nominalist, given the fact that a trope's nature and particularity differ only by a distinction of reason.

There is a further problem with the simplicity of a basic trope. A property-instance, in this case a trope, must be extended in space or else it is not clear how a colour nature can be present. A bare mathematical point of space cannot have a colour nature at it. Unfortunately, something that is spread out (i.e. extended) has to be a complex and not a simple entity because it has non-identical (even if inseparable) parts at different spatial locations. In fact, it would seem that the very same nature (redness) occupies all the subregions throughout the extended formed volume. If an entity is to be extended (as an instance of colour must be), it must be a complex entity (e.g. it contains non-identical inseparable parts) and a colour trope, therefore, cannot be simple. G. Dawes Hicks raised this point against moderate nominalist G. F. Stout when moderate nominalism was just coming on the contemporary metaphysical scene earlier in this century:

> What, for example, in his view, is really meant by saying that "qualities are in the same place as the things they qualify?" In what sense can it be asserted that a visual sense-datum *has* a specific colour? Each infinitesimal portion of such a sense-datum is *ex hypothesi* no less numerically distinct from every other portion than one sense-datum is numerically distinct from another. If, then, the colour of one sense-datum A cannot be identical with the colour of another sense-datum B, how can the colour of the part x of the sense-datum A be said to be identical with the colour of the part y of the sense-datum A? In other words, where, in such a case, do we ever reach a concrete particular thing which can be rightly said to have a particular character?[31]

Campbell is sensitive to these difficulties, especially to problems with stating identity conditions for spatially or temporally extended tropes that seem to constitute the primary and secondary qualities of ordinary macro-objects. Put briefly, his solution is this.[32] Campbell claims that basic tropes must be found that are

partless, changeless and unambiguous in their boundaries and he identifies five or six of them: space–time (construed as an absolute, non-relational trope), each of the four fundamental forces of physics taken as different space-filling fields that distribute some quantity across space-time to varying degrees, and, perhaps, consciousness understood as a pan-psychic field.

By contrast, the manifest world is composed of the things and qualities, both primary and secondary, that are given to us in everyday experience. This world is composed of quasi-tropes: supervenient entities that are mere appearances. Such quasi-tropes are not truly real and, while they are not human inventions, nevertheless there is a air of arbitrariness and conventionality about them regarding both their existence and identity conditions.[33] A manifest trope is a quasi-trope, a pseudo-entity, a mere appearance. Such quasi-tropes are taken in thought via abstraction to be separable entities. They are chunks of field tropes treated as if they were distinct and independent realities. For Campbell, an ontologist does not need to specify identity conditions for such multiply-located quasi-entities so my objections raised against them are wide of the mark. By contrast, the five or six omni-located basic tropes have clear identity conditions and that is all that should be required of Campbell's trope ontology.

Does Campbell's refurbished trope ontology provide an adequate response to the types of criticisms raised above? Is it an adequate analytic ontology and speculative cosmology? For at least three reasons, it seems not. First, it is not clear that his response allows room for the types of considerations that justify the acceptance of tropist qualities in the first place. As far as ontology is concerned, the existence of such entities is justified in terms of various metaphysical or linguistic arguments from the manifest world, especially the phenomena of predication, resemblance and abstract reference. To the degree that Campbell's basic tropes still exhibit these phenomena (e.g. most of his tropes have the property of being a field), then to that degree he has not solved difficulties in regard to them but merely relocated those difficulties. If basic tropes do not exhibit these phenomena, they why accept the existence of basic tropes? A decision to do so seems to me to be an arbitrary choice. For example, Campbell calls space (or space–time) a trope. But he also tells us that it can change and expand.

Space also has various properties (e.g. elasticity, extension, shape, volume, various other geometrical and topological properties), and the trait (whatever it is) that distinguishes empty space from the material stuff or fields that fill it. Given that Campbell is an absolutist regarding space, what is it that justifies treating it as a trope as opposed to a substance with various properties? He doesn't tell us and one suspects that, given the above characterization, most philosophers would take it in substantival terms.

Secondly, Campbell admits that the basic forces of nature are normally thought of as being exerted by various bodies with properties in virtue of which the fields of nature are generated.[34] On this view, the existence and properties of bodies are basic and fields are derivative. Campbell's ontology reverses this order. But as far as I can tell, he does not offer a single argument in favour of his preference. Perhaps this omission could be excused if his claims about these matters were merely speculative explorations of an ontology already justified on other grounds. But that is not the case. Campbell's field ontology is foundational to his trope nominalism precisely because his exposition of fields is meant as a response to serious criticisms like those raised above that are both damaging to the entire trope ontology and used to justify a realist view of qualities. In light of this fact, Campbell's failure to justify his field ontology limits the acceptability of his view of tropes to those who agree with him about fields and, more importantly, leaves his analytic ontology resting on what amount to mere assertions in speculative cosmology. This failure will not convince many realists to adopt trope nominalism.

Thirdly, Campbell's exposition of manifest tropes is so ambiguous that it is hard to tell what their ontological status is. On the one hand he says that the meaning of statements about supervenient entities cannot be captured by reductive paraphrases using only terms referring to subvenient entities, but for two reasons this seems to have no ontological implications for Campbell.[35] First, he explicitly says that supervenient entities are "pseudo-additions" and not real additions to our ontology; they provide cases that expand our descriptive resources without involving a commitment to the realities described. Secondly, for Campbell causal power is the mark of being and on his view supervenient entities lack this power.[36]

The same ambiguity characterizes his statements about dependent entities like relations, manifest tropes and sub-regions of space or fields. On the one hand he says that relational facts exist, but he also claims that they are non-existent supervenient entities. Such entities are not real because they are dependent entities. He also excepts foundationism, the view that all relational facts can be accounted for in terms of non-relational foundational facts with no further ontology beyond the latter. So while talk about relations cannot be paraphrased away, relations do not exist.[37] Manifest tropes and other sub-regions of space or fields are quasi- or pseudo-entities that are not mere inventions, yet they are not distinct items and do not give us additional entities in our ontology.[38] They are not illusions, yet they are mere appearances that are treated as if they are independent entities by an act of abstraction and they do not really exist.

This confusion seems to be the result of an inadequate set of distinctions. Campbell has no modal distinction that allows him to affirm the existence of dependent entities (e.g. Husserlian moments).[39] Only fundamental, separable entities exist. Talk about dependent entities may be irreducible but this has no ontological implications. Two inseparable "entities" differ by a mere distinction of reason. If this is correct, than Campbell's ontology amounts to a denial of the existence of macro-objects and their qualities, which many will find implausible.

It may be that he accepts some sort of modes-of-being view in which dependent entities like manifest tropes are appearances in the sense that they have some sort of existence between non-being and full being. Now the difficulties with modes of being views of existence are widely recognized and they cannot be discussed here. Suffice it to say that if this is Campbell's position, he has not made that clear. But in any case, whether he denies or accepts a diminished sort of reality for manifest tropes, he would still face the difficulties presented in the past few paragraphs. If manifest tropes don't exist, his basic ones still exhibit predication, resemblance and abstract reference and the debate about nominalism will be located there. If they have enough existence to be coloured, extended and so forth, then problems of identity conditions for manifest tropes will still be relevant.

The simplicity of Campbell's revised tropes presents another difficulty for him: Campbell is inconsistent and, in fact, equivocal

in his description of tropes. The fact that a trope is a simple entity that must simultaneously play two roles (have a qualitative nature that stands in the internal relation of exact similarity with other tropes like it and be individuated) in a basic, primitive way is not a clear or natural way of thinking about property-instances, and one must try hard to keep the view in one's mind without unwittingly treating the property-instance as would a realist. Arguably, this is why Campbell's own description of his position moves back and forth between what are apparently two inconsistent positions. To illustrate, here are two areas where this happens.

First, he repeatedly tells us that tropes *have* their natures.[40] On the other hand, he also says that tropes are identical to their natures.[41] Which is it? The having relation is not the same as the identity relation (the latter is reflexive and symmetrical, the former is not) and it is the simplicity tension that causes this lack of clarity.

Secondly, he says that the exact similarity between two tropes is an internal one grounded in the trope's natures and he also claims that this relation is primitive and unanalysable.[42] The former view tends to treat tropes as complex entities that have natures as constituents and the latter tends to view tropes as simples. Of course, the realist will accept the former horn and claim that property-instances *have* natures that ground the derived relation of similarity between two instances with the same nature. Campbell clearly needs the second horn – two tropes of the "same" kind are simples that stand in a primitive similarity relation – and it is this option that suffers from the problems already raised.

Campbell is aware of these difficulties about simplicity and he has two basic responses to them. First, he offers a sort of *tu quoque* argument against those who hold to bare particulars as individuators (see Chapter 7). He says that even though tropes *qua* simples must simultaneously sustain two different roles, the same problem attaches to bare particulars: they are simple and must simultaneously individuate and particularize.[43] According to Campbell, a particularizer gives the object in which it occurs a particular reality, as *a* definite object. But a specific object is not just an object, but this very object. And therefore, an object needs an individuator in addition to a particularizer, and bare particulars must sustain both roles.

Unfortunately, there is no genuine metaphysical distinction between particularity and individuation in this context. In fact,

Campbell's treatment of them closely parallels Thomas Aquinas's discussion of undesignated and designated matter, which, as Aquinas pointed out, differ by a mere distinction of reason with undesignated matter (e.g. flesh and bone in general), simply being a more general, abstract way of attending to designated matter (e.g. this flesh and bone). In Campbell's sense, particularity is not a different metaphysical entity from individuation. The former differs from the latter only in the level of epistemic abstraction one uses in attending to an object. Thus, there are not two metaphysical facts that need grounding as there are with so-called particularized natures (e.g. red and 1). If Campbell thinks these are, indeed, different metaphysical facts, then he has not given sufficient arguments for believing this to be the case. It seems that Campbell merely asserts his views in this regard without arguing for them. By contrast, we have investigated reasons for thinking that a trope's nature and particularity are different metaphysical entities. Campbell admits that some of the arguments listed above were successful against his identification of a trope's nature with its location/formed volume, but as we have seen, these same arguments apply to the particularity and nature of a trope.

Campbell offers a second response to difficulties surrounding the simplicity of tropes. He uses an illustration to argue that there is no problem with cases where a simple entity plays two roles: "A point is as simple as you can get. Yet points are both different from all other points and also, for example, 10 mm distant from some others. That x is involved in more than one sort of fact does not show that x is complex".[44]

But this example reveals a deep misunderstanding of the problem with tropes. A point is an individuated entity and this is so either because it has an individuator in it or else because it is identical to a bare individual. Either way, its particularity is a feature intrinsic to its being. But a point's spatial relation to another point is an external relation and is not intrinsic to the point. If that point were the only entity to exist, it would be an individual point but it would not be spatially related to anything else. Moreover, if a point is to the left of x but to the right of y, these two facts are not grounded in two different, intrinsic features of the point itself, but in two relations external to the point. By contrast, red_1 is intrinsically individual and red. If it were the only entity in existence it

would be both red and particular. Thus, the ground for these two facts about red_1 must be sought in its intrinsic being and not in external relations it sustains to other things. It is because red_1 is red that it exactly resembles other red tropes and it is because it is a particular that it is individuated from other entities. So Campbell's analogy breaks down.

We have seen that the role of location or formed volume in Campbell's moderate nominalism, along with the simplicity of tropes, are serious difficulties in his understanding of properties. A third problem area for Campbell involves abstract reference. Consider again statements like

(1) Red is a colour.

or

(2) Necessarily, red is a colour.

For reasons noted in Chapter 2, it is generally recognized that arguments based on inadequate paraphrases of such statements have been decisive against extreme nominalism. For example, consider the scattered location, L, of all red things. An extreme nominalist might paraphrase statements (1) and (2):

(1a) Red things are coloured things.

or

(2a) Necessarily, red things are coloured things.

Unfortunately, this paraphrase won't work, because red things are extended things or L located things (and this is necessarily the case for naturalist advocates of extreme nominalism), but redness is not extension or L location. The problem is that concrete particulars are complex entities in a way not true of first and second order universals (redness, colouredness).

In my view, the phenomenon of abstract reference is equally telling against moderate nominalism. A moderate nominalist would paraphrase the relevant sentences as:

(1b) Reds are colours.

or

(2b) Necessarily, reds are colours.

But this will not work. In Campbell's earlier view, the counter example could read (with or without the modal operator):

(1c′) Reds are formed volumes.

or

(1c″) Reds are L located.

(where L is the scattered location of all red tropes). But redness is not formed volume or L location. In Campbell's current position, the counter example could read:

(1d) Reds are particulars.

but redness is not particularity. Again, the problem here is not essentially one about location but complexity: in spite of what Campbell tells us, tropes exhibit a complexity (a nature and individuation) that is not like what is the case for first and second order universals.

Campbell's response to a closely related problem provides an insight as to how he would handle this difficulty.[45] Campbell's strategy involves what D. C. Williams called painless realism. Consider a case where an interior decorator says they used four colours to decorate a house. Obviously, four tropes is not what is meant by this assertion and, in fact, the statement seems to view colours as universals. Moderate nominalists, says Campbell, must make sense of cases where we appear to assert that matching tropes have something in common when, according to moderate nominalism that cannot be the case. Following Williams, Campbell makes a distinction between inherent and adherent properties. Inherent properties are the qualitative, monadic characteristics (e.g. being red) intrinsic to a specific item; that is, that a complex concrete item can have in its own right. Adherent or "external" characteristics are relational properties of an object (e.g. being the heaviest man in the room).

Now particulars can be "alike" in inherent (matching) characteristics and they can be distinguished by different adherent features, for example their compresent relations. The difference between a case (trope) and a kind (a "universal") is not a difference in ontological category, but rather, a difference in the rule used for

counting. If we look at six red tropes that match in inherent but not adherent features, if you count one for each case, you treat the tropes as particulars. When, without regard to adherent characters, you only count more than one where there is a difference in inherent traits you take note of, you *identify* all occurrences of matching tropes; that is, you treat them in a way that likens them to a realist universal. Applied to abstract reference, reds can be viewed as colours or as particulars, depending on what rule you use for counting.

It seems that painless realism is smoke and mirrors. For one thing, it is simply a label for the problem to be solved and is not a solution to the problem. The issue is not that we can notice a set of entities in a natural class and either count them as one entity on the basis of their common nature or as many entities according to their individuality. That is just what at least one version of the problem of the One and the Many has always been about. The real issue is what grounds this activity, and Campbell has no answer to this question. Moreover, his appeal to different rules of counting is just another example of the inevitable strategy of moderate nominalists of reducing metaphysical issues to epistemological ones. Indeed, they have no alternative since, for them, tropes are simples that sustain two functions, and these two functions will differ by the epistemic distinction of reason. In fact, Campbell's (and Williams's) appropriation of epistemology to solve a metaphysical problem obfuscates an obvious difficulty with the appeal to adherent features. If the problem of individuation is basically an epistemological one, namely, the task of counting, then it may well be that external relations are what we use to *single out* distinct entities in order to count them. But if the problem is metaphysical, adherent, external relations like compresence will not do, because such relations presuppose and therefore cannot constitute the individuation of their relata. [46]

4 Minimalist realism: Wolterstorff's kinds and Armstrong's properties

In Chapter 2, reasons were given for rejecting extreme nominalism (EN). Among other things, EN is what has been called a blob theory regarding concrete particulars. A blob theory of ordinary concrete particulars is consistent with a mereological analysis of those particulars as wholes constituted by separable parts; but a blob theory renders concrete particulars structureless entities with no internal differentiation of properties and relations within those concrete particulars. In this sense, EN treats concrete particulars as simples and thereby fails to acknowledge that the redness, circularity, size and other features of Socrates are real entities that are neither identical to each other nor to Socrates as a whole.

A similar conclusion surfaced in Chapter 3 regarding moderate nominalist treatments of abstract particulars according to which they are simple entities that somehow sustain exact similarity to other members of their associated similarity classes, individuation and location. Moderate nominalism is a blob theory regarding abstract particulars and this, along with other things, is a serious problem sufficient to justify the search for a more adequate treatment of properties and their instances.

Now all of this is good news for advocates of traditional realism. As will be argued in Chapter 5, traditional realism is the view that a property is a universal construed as a multiply exemplifiable abstract entity that is a numerically identical constituent in each of its instances. Thus, instances are not simples for a traditional realist; they are complex entities. When a universal is exemplified, the universal is modified and constitutes the essence of its instances,

which, in turn, are certain kinds of states of affairs, namely, complex, dependent particulars. Moreover, when a property is exemplified, neither the property itself nor the way it is in its instances is spatiotemporal. Specifically, exemplification turns out to be an inhomogeneous non-spatiotemporal nexus.

However, it would be premature to conclude from the failure of extreme and moderate nominalism that the best account of properties is the traditional realist one. Two powerful alternatives, both claiming to be realist alternatives, have been proffered by Nicholas Wolterstorff and D. M. Armstrong. The purpose of this chapter is to examine and evaluate their ontological analyses of properties, property-instances and exemplification to see if they are viable rivals to traditional realism.

Among other things, it will be argued that Wolterstorff's views are inadequate for several reasons, chief among them being the fact that he holds to a blob theory of property-instances. In the end, Wolterstorff's blob theory justifies treating it as a moderate nominalist position in spite of its purported realist alignment. Armstrong's views are not altogether clear on this issue, but the most plausible way to understand him, especially in his later writings, is to take his property-instances as complex states of affairs. This is a step forward in the quest for an adequate assay of properties and their instances. But, it will be argued, Armstrong's commitment to a certain form of philosophical naturalism leads him to some problematic features of properties and their instances that are avoided in the more adequate analyses that are part of the classic realist alternative developed in Chapter 5.

Nicholas Wolterstorff

Universals as kinds

Let us begin by examining what Wolterstorff means by a universal.[1] Here is what he tells us:

> All universals, I suggest, are *kinds* – not sets or classes, but kinds. A property, for example, is the kind whose examples consist of the cases of the property – wisdom is identical with the kind, case of wisdom. A symphony is identical with the

> kind whose examples are the performances of that symphony – Beethoven's Ninth is identical with the kind, performance of Beethoven's Ninth. This, then, is our major thesis concerning the nature of universals generally, substance as well as predicable. Universals are, all of them, kinds.[2]

Wolterstorff explains what a kind (type) is by comparing it with a class.[3] A kind is not the same thing as a class, although the two are similar in at least two ways. First, the relation of a class to its members is very close to the relation between a kind and its instances or examples. *Examples are members of a kind.* Secondly, there are kinds of kinds, just as there are classes of classes.

In spite of these similarities, however, there are two key differences between a kind and class. First, no class can have different members from those it does have, but this is not so with kinds. Kinds could have had examples different from those they do in fact have. Secondly, two classes are identical just in case they have all the same members. But there can be non-identical kinds such that there is nothing that is an example of one and not an example of the other.

Wolterstorff's use of "kind" is meant to capture what he believes to be

> a close analogy between, on the one hand, the relation of a single predicable to its exemplifications, and, on the other, the relation of a single literary work to its many copies, a single musical work to its many performances, a single natural kind to its many examples.[4]

So universals are kinds or types with examples or tokens as their instances. An instance of a universal is a member of that universal. The universal, wisdom, is identical to the kind, case of wisdom. In general, a universal is a kind whose examples are cases of that universal.

A crucial question for Wolterstorff is whether or not his account involves universals as multiply exemplifiable entities where these are understood as being numerically identical entities *in* non-identical instances. If not, then it will be difficult to sustain the claim that Wolterstorff's position is a realist one. To answer this question, it is necessary to describe what Wolterstorff means by a case.

Cases as simples

Wolterstorff uses a variety of terms to talk about cases. A case is a token, occurrence, example or member of a kind. It is an aspect of a substance. He tells us that the only way to understand the difference between a property (universal) and a case is by the way of examples. Thus, being courageous or being red are properties, but Wilson's courage and the redness of Socrates are cases. So cases are abstract particulars.

For several reasons, it appears that a case is a simple entity; that is, an entity that has no further constituents in it. First, Wolterstorff tells us that ordinary things like horses, spots or men are simple, basic entities.[5] He means by this that they are non facts (i.e. states of affairs); they are not complex entities composed of their constituents. Elsewhere, he holds that ordinary things, such as horses or men, are cases of their kind (universal). Thus, the man Socrates is a case of the kind, man. He is a simple entity. So, in general, a case of a kind is a simple entity that does not have that kind as one of the constituents *in* the case. In general, Wolterstorff is against constituent ontologies that turn ordinary things into facts. Secondly, Wolterstorff explicitly states that his cases are like the abstract particulars (tropes) of Stout and Williams. Since Stout and Williams hold that abstract particulars are simples, then cases must be as well. It would seem, then, that Michael Loux, a former student of Wolterstorff, was correct when he said that Wolterstorff's cases are simple, basic entities.[6]

Wolterstorff is not clear on this, however, and certain statements he makes seem to indicate that the universal is a numerically identical constituent *in* all its constituents. He tells us that a universal is that which can be predicated of many, it is "shared in common" by all its exemplifications, and when a universal is predicated of a thing, that thing "possesses" or "has" that universal. Furthermore, he says that there are cases of abstractive attention where one attends to a universal. This would happen, for example, when one looks at the colour of his coat and the colour of a paint chip and goes on to affirm that the two colours are identical.[7] Similarly, in seeing a token-word or writing a token-poem one sees or writes the respective types.[8] Finally, a universal is an entity that is repeatable like a word type is repeatable.[9] All of this *seems* to indicate that the universal is a multiply exemplifiable constituent *in* all its (complex) instances.

In spite of this *prima facie* evidence of cases being complex, it still seems accurate to hold that a case for Wolterstorff is a simple entity. The evidence for the complexity of a case can be given a different interpretation by examining what Wolterstorff means by exemplification.

Exemplification

Consider the diagram from *On Universals* shown in Figure 4.1.[10] Wolterstorff would say that Socrates is an exemplification of wisdom (since he is a wise thing) and the case "Socrates's wisdom" is an instance of wisdom. Thus, when wisdom is exemplified by or predicated of Socrates, this is to be analysed in terms of a case (a simple entity) and two relations, "being a case of" and "being an aspect of". Socrates exemplifies wisdom or wisdom is "in" Socrates in the sense that the-wisdom-of-Socrates, a simple entity that is a case or member of the kind, case of wisdom, is an aspect of Socrates. It is clear from this that wisdom is not a numerically identical constituent that is directly in all its exemplifications (Socrates, Plato, etc.). Wisdom can only be "in" its exemplifications as a constituent, if it is "in" its *instances* (Socrates' wisdom, Plato's wisdom, etc.), which are in turn "in" Socrates.[11]

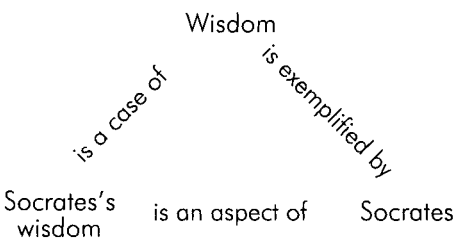

Figure 4.1

This means that if wisdom is to be a numerically identical constituent of many non-identical entities, this can be so only if wisdom is a constituent of each of its cases. As noted above, Wolterstorff holds that one can attend to a universal, say redness, in abstractively attending to a red ball. But this is not quite accurate. Wolterstorff does say this, but he clarifies his position by saying

that what one attends to in this case is an *exemplified* universal. So the way a universal is "in" its exemplification is by a case of that universal being "in" that exemplification.

The crucial issue, then, comes down to this. What is the relation "being a case of" that obtains between the universal and its cases? Is this relation such that the universal is a multiply instanced entity in the sense of it being a constituent in each of its instances? This does not seem to be Wolterstorff's view, and to show this, it is important, first, to analyse his relation "being a case of".

Wolterstorff seems to say that this relation varies depending on what one is talking about. The performances of a symphony bear the relation "performance of" to the symphony, books are "copies of" book-types, greens are "examples of" greenness. In general, however, he says this relation is a type-token relation.[12] This, however, is not very helpful. In fact, it is either circular or vacuous. It is circular if the type-token is construed primarily as a linguistic phenomenon, since in this case the linguistic phenomenon presupposes and is merely one set of examples of the more general kind-case distinction. So "type-token" could not be used to explain "kind-case" distinctions because the former is a species of the latter. If, on the other hand, "type-token is merely a label for "kind-case", then it adds no real content to the latter and is hardly illuminating.

Elsewhere, Wolterstorff states that the relation of "being a case of" is very much like the $\in$ of set membership in the sense that cases are members of their kind.[13] But neither the notion of "being a member of" not that of "type-token" lend themselves (without further clarification) to an attempt to analyse "is a case of" in terms of the kind being a constituent of the case.

There is a deeper reason, however, why the relation "being a case of" cannot be understood in terms of the universal being a constituent in its cases. This reason has to do with his wholesale rejection of constituent ontologies.[14] According to Wolterstorff, such ontologies are reductionistic, for their advocates seek to discover the constituents of ordinary things (and by extension, cases) when the latter should be treated as basic, simple entities. For Wolterstorff, the relation "being a constituent of" does not obtain between all qualities and ordinary things. It only holds for accidental qualities.

For example, recall our red, round spot Socrates. The relation "being a constituent of" obtains between it and its constituents. In

other words, Socrates is a simple entity and red and round can be constituents of Socrates provided that a case of red and case of round are "in" Socrates. But "being a spot" cannot be a constituent of Socrates, for the relation "being a constituent of" only holds between the spot and its (accidental) constituents. In order for the relation "being a constituent of" to obtain, the spot must already exist, ontologically speaking, so that it and its constituents can be related.

If A and B cannot stand in the relation of "being a constituent of" unless they already exist as self-contained entities ontologically prior to entering the relation, it should be clear that B cannot be a complex entity that has A in it as an essential constituent. B is simple. "Being a spot" cannot be a constituent of Socrates, for if it were, Socrates and "being a spot" would already have to exist, according to Wolterstorff, before the relation obtains. But how could Socrates already exist as a spot before it has "being a spot" in it?

This same argument applies to greenness and a green case. In general, "being a constituent of" obtains in cases of accidental predication.[15] Redness is a constituent of Socrates in that a case of redness is a constituent of Socrates. But redness is not a constituent of the red case nor is being a spot a constituent of Socrates. Socrates and a case of redness are simples without essential constituents that constitute their natures. For they must exist before (in the sense of ontological priority) they can have constituents. But if their essential natures were constituents in them, they obviously could not exist ontologically prior to the having of their essences as constituents. So the essence of a case is not a constituent of that case. Put another way, the kind-case relation is not one in which the former is a constituent of the latter.[16]

Objections to Wolterstorff's "realism"

If this portrayal of Wolterstorff is accurate, then his version of "realism" is objectionable for a number of reasons. First, it is hard to make sense out of his account of exemplification because the relation "being a case of" is unclear. What is this relation? The mere assertion that it is a type-token relation is simply inadequate. The point is not that Wolterstorff has failed to define this relation. It is certainly open to him as an ontologist to assert that this

relation is basic and undefined. This is clearly his position. The main difficulty is that it is hard to see how this relation so understood does the job required of it, viz. relating the kind to its case. It is not a part–whole relation of any kind because the kind is not a constituent of the case. And if the relation of predication is taken as some sort of constituent–whole relation (if A is predicated of B, then A is a constituent *in* B), then this is not a predication relation. Neither is it a model-copy relation.

The only interpretation of "is a case of" that seems plausible is to take it as an "is" of classification. In other words, when Socrates's redness is a case of the kind, redness, then this means that Socrates's redness is to be classified with other red cases as being members of the kind, redness. So "being a case of" is very close to the $\in$ of set membership, except for Wolterstorff's caveat about the differences between sets and kinds. But if this is what Wolterstorff means by "is a case of", then he gives no ground whatsoever as to why a red case is in the kind redness and a green case. It cannot be due to the red case having redness as a constituent while the green case does not. The red case does not have redness as a constituent. Not does Wolterstorff ground membership in a kind in some sort of exact similarity relation. It may be that the unity of the members of a kind is some sort of ultimate, distributive unity, like Stout's position on the distributive unity of a class. But in Chapters 1 and 3 we have already found problems with this view, so they shall not be repeated here. Thus, the relation of "being a case of" is undefined and inadequate and, therefore, so is Wolterstorff's treatment of exemplification.

Furthermore, many of the problems that surfaced in Chapter 3 regarding tropes also apply to cases because cases are tropes. Most importantly, both are simple entities. It will be useful to highlight two main problems here. For one thing, how does a case get its nature? Since the cases of the kind, redness, do not have redness as a constituent in them (cases are not complex entities), then they reduce to bare particulars. The "red" in "red_1" is not in the case. In this regard, Herbert Hochberg has pointed out that "as long as such a view acknowledges qualities, its instances might just as well be bare particulars. The use of instances is significant only when used as a [Moderate] Nominalistic gambit".[17] D. M. Armstrong has noted that this makes different cases, say a yellow case and a red

case (he calls them Stoutian particulars) indistinguishable from one another. Says Armstrong,

> The question is: is there any reason present in the nature of the first Stoutian particular, but lacking in the nature of the second Stoutian particular, why the first particular has this universal property? If there is no reason, then it seems that the Stoutian particulars, in abstraction from their universal properties, are mere bare particulars. This would make the different Stoutian properties of a thing, in abstraction from their universal properties, indistinguishable from each other, which seems absurd.[18]

On the other hand, if it is allowed that somehow or other, redness is in each red case, then if the cases are still simple, no account is given of their individuation. If the natures of the two red cases are not bare but are in them, then this nature is a universal in both. But since cases are simple, their individuation is not grounded.

Wolterstorff believes that he has a solution to the problem of individuation. He believes that there is a property that every individual necessarily has that is a distinct property that only that individual has. This is the property of being identical to itself. For any entity A, it alone has the property of being identical to A and this is what individuates it. So red_1 is individuated by the property "being identical to red_1".[19] But this is not a basic entity. As will be argued in detail in Chapter 7, it is an impure property that already presupposes the existence of A before it can exist and be characterized, so it cannot account for the individuation of A without engaging in a vicious circle. Thus, it does not seem that Wolterstorff has an adequate account of what grounds the individuation of different cases of the same kind.

Summary

In summary, it does not seem that Wolterstorff's position is a realist one. His kinds are not universals, for they are not multiply *exemplifiable* entities. They are not identical entities that are constituents of non-identical instances. Kinds are some sort of collection of cases, but universals are not collections of anything.

Kinds have members but universals have instances. Things don't belong to universals, they have universals.

Moreover, his view fails to be realist because his ontology includes cases and cases are simple entities. Their natures are not in them. In order to embrace cases and stay within a realist framework, Wolterstorff should have paid more attention to his own criticism of Bergmann. He argues that Bergmann's only reason for holding on to bare particulars is to safeguard realism and he seems to imply that this is not a necessary strategy for a realist.[20] But, on the contrary, bare particulars would halt Wolterstorff's slide to moderate nominalism. With bare particulars in his ontology, he could make cases complex entities with universal constituents grounding their nature and a bare particular grounding their individuation. But as it stands, John Perry's comment seems fitting:

> Wolterstorff describes his views as "something of a rapprochement between classical realism and classical nominalism". I am inclined to call it an uneasy compromise. We have all the universals the Realist wants and more, but they explain just what the Nominalist thinks they explain: nothing.[21]

D. M. Armstrong

Armstrong on naturalism and physicalism

Armstrong approaches the problem of universals from within a set of broader philosophical commitments, two of which are naturalism and physicalism.[22] For Armstrong, naturalism entails the doctrine that the world is all that exists and it is nothing but a single spatiotemporal system. He also asserts that the world is the total set of states of affairs such that all existents must be accounted for within the spatiotemporal world. Nothing can be allowed to exist outside the space–time system. Moreover, apart from the primitive varieties of ordinary experience, it is natural science that gives us detailed knowledge of reality.

Finally, Armstrong accepts what he calls reductive physicalism according to which the world is completely described in terms of a completed physics. He further affirms that his version of physicalism should be called strong physicalism: the only particulars that exist

are those in the space–time system governed by nothing more than the laws of physics. Moreover, all fundamental universals are those studied by physics, all other first order universals are structures involving nothing but these fundamental universals, and all fundamental laws are connections holding between these fundamental universals.

Armstrong is clear that a naturalist must find unacceptable uninstantiated universals, those classes of universals that are not the natural properties and relations characterizing the causal, physical objects of physics, and a priori knowledge. His case for these claims shall not be examined here. On the other hand, he believes that all versions of nominalism are unacceptable and that a robust version of realism about universals can be integrated with naturalism and physicalism. His own form of "realism" is just such an attempted integration and his model centres on explicating a view of: the nature of universals themselves; the predication "relation"; and individuation consistent with naturalism.

Before we turn to the details of Armstrong's explication of these three features of his ontology, it is important to reiterate a constraint that Armstrong accepts for his project of developing an adequate theory of universals. He takes it that a physicalist version of naturalism provides the contours within which his theory must be developed and he clearly understands this to require that there be no non-spatiotemporally located entities in his ontology.

For Armstrong, all entities in the naturalist ontology must be spatially located; knowledge of them can be located within physical, causal processes; and they must be capable of entering into causal relations and their existence can be given a natural scientific causal explanation. To illustrate these points in Armstrong, the following statement is an example where he uses a naturalist externalist epistemology to settle issues in ontology: "If any entities outside this [spatio-temporal] realm are postulated, but it is stipulated further that they have no manner of causal action upon the particulars in this realm, then there is no compelling reason to postulate them".[23] In this context, Armstrong is claiming that the only way something can interact with natural entities – including cognitive processes so as to be objects of knowledge – is by way of causation.

Elsewhere, Armstrong offers the following as a criterion for an acceptable naturalist ontology:

> I suppose that if the principles involved [in analysing and explaining the origin of or processes of change in things within the single all-embracing spatio-temporal system which is reality] were completely different from the current principles of physics, in particular if they involved appeal to mental entities, such as purposes, we might then count the analysis as a falsification of Naturalism.[24]

Finally, as a naturalist, Armstrong explicitly rejects internal relations on the grounds that they cannot be spatiotemporally located.[25] This, then, is the backdrop against which Armstrong's theory of universals should be understood.

Armstrong's universals

Regarding universals, the only way Armstrong can sustain realism and deny that universals are outside space and time is to reject the axiom of localization: no entity whatsoever can exist at different spatial locations at once or at interrupted time intervals. Armstrong rejects this axiom and claims that universals have multiple location and exist wherever the particulars having them are located. Thus, universals are entities that are spatially located at the place of the particulars that have them and they are fully present at each exemplified location.

In one place Armstrong expresses a mild inclination to reject the literal multiple location of properties in favour of the view that all universals are "in" states of affairs that are themselves spatiotemporally located in the cosmos and, in this sense, are part of what constitutes the cosmos.[26] For three reasons, this theme in Armstrong will not be discussed further. First, it runs contrary to almost everything he says about spatiotemporal location as a criterion of ontological commitment; for example, that internal relations should be rejected because they cannot be located. This may be why he expresses himself here with the qualification that he is simply inclined to the view, not that it actually represents his considered judgment about the matter. Subsequently, he seems to have reaffirmed the spatiotemporal location of every existent.[27]

Secondly, Reinhardt Grossmann has pointed out that when Armstrong claims that all relations must be located in space and

time except spatiotemporal ones, this concedes what the anti-naturalist argues, viz. that they are abstract objects, and Armstrong is clearly against the existence of the latter.[28] Thus, this move by Armstrong concerning relations turns out to concede more than he may have realized and, in any case, if Grossmann's claim is correct, as it seems to be, then the concession is contrary to the entire spirit and metaphysical character of Armstrong's entire philosophical programme. Grossmann's point applies equally to a similar move for non-relational properties.

Finally, one of Armstrong's main concerns with uninstantiated universals is that if they exist, they exist "in another realm" outside space and time. Now, if the concern is to avoid such entities, it is not sufficient to claim that universals must be instantiated, because the traditional realist will say that properties remain abstract objects even while they are non-spatiotemporally "in" their instances. Thus, Armstrong needs to locate properties to avoid treating them as abstract; it is not sufficient merely to require of them that they be exemplified. In sum, the most consistent reading of Armstrong is one that preserves most of his statements about universals, viz. that they are multiply located entities.

Armstrong on predication and individuation

Armstrong's treatment of predication and individuation are closely related. Universality and particularity are, he says, inseparable aspects of all existence, they are neither reducible nor related to each other and, although distinct, their union is closer than a relation. The distinction between universality and particularity is similar to Duns Scotus's formal distinction and, he claims, is like the way that shape and size are united in a particular.

This leads him to distinguish a thick from a thin particular. A thick particular is a state of affairs (e.g. A's being F), and as such it is a particular along with its properties. The particular "enfolds" its properties in the sense that they are spatially located where the thick particular is. In the statement "this is hot", the word "this" refers to a thick particular and says that hotness is among its properties. The thin particular is the particular considered in abstraction from all its properties. It is not a thing *per se*, but amounts to bare numerical difference or thisness, the

individuating factor that makes the thick particular more than just a bundle of universals.

Armstrong's view of individuation needs to be elaborated a bit more before it can be clear just what he means by it. He rejects transcendental realism in favour of immanent realism. We will see shortly that he is confused about the real nature of this distinction, but as he understands it, transcendental realism has universals standing entirely apart from their instances and immanent realism depicts them as being in the being of their instances, in Armstrong's position, being at the very place of their instances and being "enfolded" by them. At one time, Armstrong rejected what he calls relational immanent realism; roughly, the view that a thick particular is a complex state of affairs composed of a universal, a bare particular or substratum and a relational tie of predication. Armstrong's basic argument against relational immanent realism is the claim that it falls prey to Bradley's famous regress argument against relations: if a substratum requires a relation to be bound to a property, then the substratum will require a relation to be bound to the first relation, and so on. Because of this, Armstrong claims that what is needed is a non-relational immanent realism. And his account of thick and thin particulars is just such an account. Says Armstrong, "this version of Immanent Realism [is one] which distinguishes the particularity from the properties of a particular, while denying that the two aspects are related".[29] In sum, particularity and universality differ by a formal distinction, they are indistinguishable although inseparable, and "they" are too intimately conjoined to be related.

In his more recent thinking, Armstrong has followed Frege and sought to incorporate exemplication into the universal itself.[30] He claims that properties are unsaturated entities that are filled by particulars, rather than being complete entities in their own right that are exemplified by particulars. According to Armstrong, this move allows him to avoid a Bradley-type regress that (allegedly) comes from admitting that exemplification is a relation and it makes sense of the fact that universals are dependent on states of affairs and that there are no uninstantiated universals.

Unfortunately, this move seems merely to be a verbal shift, for now universals must sustain two functions – having an intrinsic qualitative nature and being had by something – instead of having

two entities each of which sustains one of these functions. It is hard to see how the former is preferable to the latter. Moreover, being unsaturated must now be taken as a real feature of universals different from their qualitative natures (e.g. since redness and greeness differ regarding their qualitative natures but agree in being saturateable). If so, it is hard to see how being unsaturated is a spatially located feature of either the universal or the state of affairs into which it enters. It is important to remember that for Frege, neither concepts nor their being unsaturated were spatiotemporally located.

Third, there are other ways to avoid Bradley-type regresses without appealing to the notion of saturation and these strategies are well known. Some will be examined in Chapter 6.

Finally, no gain is made for Armstrong regarding the dependence of universals on states of affairs or in providing a rationale for rejecting uninstantiated universals. Frege himself believed that concepts could exist without entering a state of affairs (Armstrong's language) or without being saturated. It is just not clear why something could not exist while unsaturated. Without further argumentation, which Armstrong fails to provide, a mere appeal to saturation and a particular's filling a universal provides no justification whatever for what Armstrong is after. Indeed, Frege's ontology, including his views about saturation, have long been seen as contrary to the naturalist stance.[31]

Evaluation of Armstrong's realism

Is Armstrong's version of realism a viable way to embrace properties within the constraints of naturalism? The answer seems to be no, and to see why it is important, first, to focus on certain issues in Armstrong's view of properties as universals and secondly, on issues in particularity and individuation. Let us begin with properties.

First, is it not at all clear that his understanding of properties is, even if acceptable on other grounds, compatible with naturalism. It would seem that naturalists should accept the axiom of localization and most naturalists would agree with this assertion. Paradigm case naturalist entities would appear to obey the Principle of In toto Location (PIL):

PIL: If entity *e* exists in toto at location L, then both (1) if *x* has proper parts, they overlap with and only with sub-regions of L, and (2) neither *e* nor any of its proper parts overlap with some other location P such that P is not identical to L or a sub-region of L.

If a necessary condition for being an entity in a naturalist ontology is conformity to PIL, then Armstrong's universals are not natural entities. It is just not clear how entities that are fully, completely present at each embodiment are relevantly similar to other entities embraced by naturalism to yield a consistent, economical ontology.

Besides considerations of PIL, most naturalists would find it difficult to believe that an entity could simultaneously be in motion and at rest if such a view is even coherent. But Armstrong's properties are precisely such entities. If stationary particular *x* has F and moving particular *y* has F, then since F itself is at the location of the particulars, F is both moving and at rest. In my opinion, his universals are just as unacceptable for naturalism as is their construal as abstract objects.

It may be objected that only particulars must obey the laws of motion and properties are under no such constraint. However, to his credit, Armstrong realizes that a consistent naturalist is most reasonably taken to require that universals resemble particulars in having spatiotemporal location. But, then, why not make the same requirement regarding the prohibition of being simultaneously in motion and at rest? If Armstrong relaxes the second requirement, why not relax the first one? At the very least, Armstrong owes us an account of this problem and, to my knowledge, he has not offered one.

Secondly, it is not clear that properties are located at the place of their instances.[32] For one thing, many properties (being even, triangularity) and relations (the musical relations between sounds in a music chord, being the father of, various logical relations) are such that it is just not clear what it would mean to take them as spatial, natural properties or relations. Armstrong could reject such entities on the grounds that they do not have causal powers and, thus, they have no being. But many philosophers would find it more reasonable to reject causality as the mark of being than to eschew these entities.

Moreover, if a red ball is on the table and Armstrong claims that redness is spatially located on the table where the ball is, a reductive paraphrase is available to a traditional realist who advocates a view of properties as abstract objects: the ball is on the table and redness is "in" the ball so the ball is located but the redness is not. The realist paraphrase allows one to say everything that needs to be said as far as spatial location is concerned, and the paraphrase includes a spatial particular (the ball) and two non-spatial entities (redness, and the way it is "in" the ball). Further, the instance of redness (see below) may be spatial, but the redness "in" that instance need not be. Put differently, every spatial predicate relevant to the state of affairs in our purview can be ascribed to either the ball or the instance of red (Husserl called it a moment)[33]. But redness itself is not spatial. When one sensuously attends to something spatial, one is attending to an instance of redness (or the ball itself), and not to redness. Redness is a colour, it has hue, intensity, saturation, it resembles orange more than it resembles blue, and so forth. All the facts we know about red itself are not spatial facts. Spatial predicates are true of instances of redness, not redness itself.

Thirdly, is spite of what Armstrong claims, statements like

(1) Red is a colour.

and

(2) Red resembles orange more than it resembles blue.

express necessary truths whose modality is grounded in the de re necessity of universals and the relevant relations between or among them. Traditionally, these have been understood as truths of reason, synthetic a priori truths that are true throughout possible worlds, including those with no red particulars. In general, for some universal F, there is a possible world w_1 such that F exists in w_1 but no objects exemplify F in w_1. Propositions like (1) and (2) are true throughout possible worlds and, according to traditional realists, they are grounded in a view of universals as necessary beings whose existence is independent of the existence of particulars exemplifying them, and in genus/species or internal relations among universals. For example, (1) expresses a genus/species relation between a determinable (being coloured) and a determinate (being red). And (2) expresses internal relations that obtain in a quality

order consisting of the various determinates of a higher order, determinable universal. And arguably, both the truth and modality of these propositions are knowable a priori.

Two arguments are central to Armstrong's case against transcendental universals. The first one turns on his causal criterion of being. However, it would seem that this criterion is question-begging in this context and, arguably, less intuitively plausible than the reality of uninstantiated universals. More will be said about this in Chapter 6. The second one represents a serious misunderstanding of what it means to say that some universal F is a transcendental universal. Armstrong appears to think that an advocate of transcendental universals must take such entities as "standing apart" from the spatiotemporal world; that is, properties stand apart and exist separated from their instances in a different realm. The properties do not enter into the being of their instances.[34] This leads Armstrong to embrace what he calls the Principle of Instantiation: For each property P, there exists (not necessarily now) a particular, x, such that Px.

Unfortunately, Armstrong's statements in this regard are confused. For one thing, the debate between Platonists and Aristotelians about the relationship between properties and their instances is not a debate about the "location" of those properties (e.g. either in Plato's heaven or spatially contained in their instances), but rather, about the ontological independence of properties from their instances. Secondly, although this point will be developed more in Chapter 5, it has already been noted that someone who sees universals as transcendental, abstract entities can still take it to be the case that universals enter into the very being of their instances. Armstrong seems to think that the reading of Plato which turns properties into perfect particulars that are merely copied in their instances, or something of the sort, is the only view available for the transcendental realist, but this is just mistaken. The issue here turns on the way a property is "in" its instance.

Thirdly, Armstrong's statement of the principle of instantiation reveals a further problem with his position. He claims that a property can exist at a time when it is not currently being instantiated as long as it is instantiated at some time or another. Presumably, this could allow him to embrace properties ontologically (not temporally) prior to the Big Bang or properties (e.g. certain colours) that

have only recently been exemplified. But how can the current existence of some entity depend on the fact that in the future (or past) it will be exemplified in space and time? And how are we to conceive of the current mode of existence of such an entity? How does it currently fit into a naturalist ontology? These are difficult questions to answer and we will revisit this issue in Chapter 6.

Moreover, even if we grant the principle of instantiation, it does not follow that properties are spatially located at the place of their instances, but only that their existence depends on that of the instances themselves. It could still be the case that properties are abstract entities "in" their instances in a non-spatial way. In sum, Armstrong's view of transcendental universals is historically inaccurate and involved in problems in its own right. For these reasons, it seems that he has not made his case against the existence of transcendental universals.

When we turn from properties to his account of particularity and individuation, things get no better. Indeed, it is not entirely clear what his considered opinion of the matter actually is. If he takes the distinction between universality and particularity to be a formal distinction between "entities" that do not need to be related, then, as became apparent in the discussion of Campbell's tropes, this amounts to the claim that they are identical. If, on the other hand, he says that the thin particular (entity *a*) is a constituent in a thick particular (entity A) that is non-identical to a property/properties of A, then his view seems to reduce to a form of immanent realism with bare particulars. In this case, a thin particular turns out to be a bare particular that individuates, and a thick particular is a particular in virtue of its possession of the thin particular. This is the victory of particularity. However, the victory of particularity is paralleled by the victory of spatiality, so on this latter reading of Armstrong, it is easy to see the universal in A and the predication relation between that universal and the thin particular as non-spatiotemporal entities. If this is the most satisfactory analysis of a thick particular, then given Armstrong's own statements about what is required of a naturalist analysis of properties, it counts as a refutation of naturalism.

On the other hand, it could be argued that Armstrong's earlier views on particularity and individuation collapse into moderate nominalism, and it is no accident that in some of his later writings,

he has opened up considerably to moderate nominalism compared to his earlier writings.[35] In one place he says,

> So provided you abandon uninstantiated universals (good riddance, I say), and provided Universals theorists and Trope theorists coordinate their views on just what properties and relations the world contains, it is easy to pass back and forth between the theories.[36]

Indeed. Armstrong's claims that universals are spatiotemporally located at the place of their instances and his inadequate view of individuation are virtually indistinguishable from the trope nominalism of Campbell which, as observed in Chapter 3, is riddled with problems.

However, the various problems with moderate nominalism have pushed Armstrong towards bare substrata, although a failure to make a distinction in two senses of "being bare" obscures Armstrong's views on this subject. As will become clear in Chapter 7, advocates of bare particulars distinguish two different senses of being bare along with two different ways that something can have a property. In one sense, an entity is bare if and only if it has no properties in any sense. Now bare particulars are not bare in this sense. They do not exist unless they possess properties.

There is another sense of "bare", however, that is true of bare particulars. To understand this, consider the way a classic Aristotelian substance has a property, say, some dog Fido's being brown. On this view, Fido is a substance constituted by an essence that contains a diversity of capacities internal to, within the being of Fido as a substance. These capacities are potentialities to exemplify properties or to have parts that exemplify properties. The capacities are grounds for the properties like brownness that Fido comes to have. When a substance has a property, that property is "seated within" and, thus, an expression of the "inner nature" of the substance itself. Thus, Richard Connell is correct to distinguish the way substances and bare substrata have properties when he claims that properties are not simply tied to substances, but rather "rooted in . . . and caused by the substance".[37]

In contrast, bare particulars are simple and properties are linked or tied to them. This tie is asymmetrical in that some bare particu-

lar *x* has a property F and F is had by *x*. A bare particular is called "bare", not because it comes without properties, but in order to distinguish it from other particulars like substances and to distinguish the way it has a property (F is tied *to x*) from the way, say, a substance has a property (F is *rooted within x*). Since bare particulars are simples, there is no internal differentiation within them. When a property is exemplified by a bare particular, it is modified by being tied to that particular. Thus, bare particulars have a number of properties (e.g. being red), and they have some properties necessarily (e.g. particularity), in the sense that a bare particular can exist only if it has certain properties tied to it. Now, this fact about bare particulars neither makes them identical to their properties nor does it entail that properties are constituents within a bare particular. Just because a man never comes out of his house naked, it does not follow that he is his clothes or that they compose him as constituents.

Armstrong's failure to distinguish these two senses of "being bare" have lead to confusion in attempts to interpret his account of individuation because he explicitly rejects yet implicitly seems to accept bare particulars. He rejects bare particulars for the following reason: "A particular that existed outside states of affairs would not be clothed in any properties or relations. It may be called a *bare* particular. If the world is to be a world of states of affairs we must [reject] Bare Particulars".[38] Yet as we have seen earlier, Armstrong makes a distinction between a thick particular (*a*'s being F) and a thin particular (*a*). He calls the latter a Lockean substratum and accepts it as an individuator. For Armstrong, the particularity of a normal (thick) particular is is an irreducible, unanalysable feature of normal particulars. For him, particulars *qua* particulars do not differ in nature, but in virtue of bare, numerical difference, bare particularity, and he explicitly identifies this individuator (the thin particular) with a Lockean substratum.[39] Armstrong rejects bare particulars in the first sense but not the second, and given the fact that advocates of bare particulars embrace the second sense, his view is a bare particular position.[40]

There is a lesson to be learned from Armstrong's developing position. If one accepts a realist construal of properties, then one must also embrace some type of individuator that is not a normal property (e.g. an impure property) or is not a property at all, or else

the position collapses into moderate nominalism. In his most recent treatment of the subject, Armstrong has acknowledged this point.[41] He continues to embrace universals, he explicitly rejects the individuative adequacy of spatiotemporal location, tropes and impure properties and he takes it that "bare numerical difference" is what grounds the particularity of thick particulars. But on this reading of Armstrong, it is hard to see how his account is superior to a traditional realist view of individuation and particularity. In fact, it is hard to see how his position avoids collapsing into the traditional realist account.

If this is correct, then, in the absence of a better realist attempt to coordinate a joint commitment to universals and naturalism, and in view of the difficulties with both extreme and moderate nominalism, the traditional historical position on the matter seems to be the correct one: the existence and nature of properties is a serious problem for naturalism, so serious that naturalism has been one of the chief motivating factors for advancing extreme nominalism and nominalism.

Throughout the history of philosophy, many have advanced the idea that there is a connection between naturalism and different versions of nominalism. Specifically, many philosophers have argued that naturalism requires a nominalist rejection of the existence of properties construed along traditional realist lines as abstract, multiply exemplifiable entities that non-spatially inhere in their instances. Thus, in *Sophist* 246A–C, we read these words from Plato:

Stranger: What we shall see is something like a battle of gods and giants going on between them over their quarrel about reality.
Theaetetus: How so?
Stranger: One party is trying to drag everything down to earth out of heaven and the unseen, literally grasping rocks and trees in their hands, for they lay hold upon every stock and stone and strenuously affirm that real existence belongs only to that which can be handled and offers resistance to the touch. They define reality as the same thing as body, and as soon as one of the opposite party asserts that anything without a body is real, they are utterly contemptuous and will not listen to another word.

Theaetetus: The people you describe are certainly a formidable crew. I have met quite a number of them before now.

Stranger: Yes, and accordingly their adversaries are very wary in defending their position somewhere in the heights of the unseen, maintaining with all their force that true reality consists in certain intelligible and bodiless forms. In the clash of argument they shatter and pulverize those bodies which their opponents wield, and what those others allege to be true reality they call, not real being, but a sort of moving process of becoming. On this issue an interminable battle is always going on between the two camps.

In the contemporary setting, Howard Robinson remarks that "materialist theories are incompatible with realist theories of universals. The tie between nominalism and materialism is an ancient one".[42] Since most philosophers currently see physicalism (which for our purposes can be used synonymously with materialism) as the best form of naturalism, Robinson's remark applies with equal force to a widely accepted contemporary version of naturalism to be described below. Along similar lines, Reinhardt Grossmann has argued that naturalists are at war with what he calls ontologists. [43] According to Grossmann, the universe is the spatiotemporal totality of physical entities and the world includes every existent whatever, including non-spatiotemporal abstract entities such as properties. Naturalists deny the world and only believe in the universe; ontologists like Grossmann accept the world.

Johanna Seibt notes approvingly that extreme nominalist Wilfrid Sellars argued several decades ago that "since the basic relation of a Platonist theory of predication, i.e. exemplification, cannot be defined in naturalist terms, a nominalist theory of predication proves to be '. . . the very foundation of a naturalist ontology'".[44] Accordingly, Sellars claimed that "a naturalist ontology must be a nominalist ontology".[45] The analysis of Armstrong's view of universals offered above should help to clarify why Sellars and others take this to be the case.

5 Traditional realism: properties are abstract objects

In Chapters 2 and 3, reasons were given for rejecting extreme and moderate nominalist analyses of properties and property-instances. This provided justification for the claim that a realist analysis is the correct one. However, in Chapter 4 it became evident that there are different positions that claim to be realist ones. And two of those positions – Wolterstorff's and Armstrong's – were found to have serious problems sufficient to justify the search for a more adequate solution to the problem of universals. In this chapter, the focus will be two-fold. First, an analysis of the traditional realist construal of properties and property-instances will be offered and evaluated. In the process, it will become clear that an essential component of the traditional view is an assay of property-instances as complex entities. However, some philosophers opine that any ontology with property-instances over and above properties and concrete particulars is a moderate nominalist ontology. This claim is sometimes illustrated by proffering a moderate nominalist interpretation of Edmund Husserl's ontology. The second focus of the chapter is an analysis and rebuttal of the supposed connection between nominalism and property-instances in general, and moderate nominalism and Husserl in particular.

The traditional realist view of predication

Traditional realism, predication, and property-instances

To elaborate on a traditional realist understanding of properties and property-instances, recall our round, red spot, Socrates. According to traditional realism, a universal is a multiply exemplifiable entity that is a numerically identical constituent in each of its instances. Thus, instances are not simples for a traditional realist; they are complex entities. Now consider the following three sentences and the states of affairs they describe.

(1) Socrates (a red, round spot) is red.

(2) Red_1 is red.

(3) This (individuator, e.g. a bare particular) is red.

The state of affairs described by (1) is best understood as follows: Socrates has a property-instance in it, red_1, and red_1 is red. The relation between red_1 and Socrates is a sort of constituent/whole relation. Let us call this the "moment/whole" relation, to borrow Husserl's terminology. Observe that (1) is grounded, at least in part, in (2). The "is" in (1) is grounded in two different "ways of being in" – the way a moment is in a whole (Socrates) and the "way of being in" expressed in (2).

The state of affairs described in (2) contains a second kind of constituent/whole relation. (2) states that the universal, redness, is a "part" of the whole, red_1 in the sense that redness is one of the constituents that is *in* red_1. This is not a spatial sense of *in*. Let us call this "way of being in" the relation of "being an essential property-constituent of". Two things should be said about this relation as it is found in (2). First, this is a constituent/whole relation that differs from the "moment/ whole" relation of (1) in at least one important way. If *b* stands to *a* in such a way that *b* "is an essential property-constituent of" *a*, then the following two principles hold between *a* and *b* that fail to obtain in the moment/whole relation:

- *b* transcends *a* in that *b* is necessary for *a*'s existence but not vice versa. Moreover, *b* enters into the being of *a* but not vice

versa. Here *b* is redness and *a* is red_1. Redness can exist without red_1, and not vice versa. Red_1 could be destroyed but redness would still exist unchanged. Thus, there is a modal distinction between a universal and its instances. When a universal is exemplified, the universal is modified and constitutes the essence of its instances, which, in turn, are complex, dependent particulars. The same could not be said for the "moment/whole" relation in (1) between Socrates and red_1.

- *b* is the essence of *a*; that is, *b* answers the question "What is *a* an instance of?" Redness is the essence of red_1. Red_1 is an instance of redness in that redness is immanent within red_1 as its informing essence.

Secondly, this last point suggests an implication of (2). Sentence (2) entails an "is" of classification. It implies that red_1 is to be placed in the class of red instances, where "class" refers to a group of entities that literally share some entity in common. An "is" of classification is more clearly expressed in

(2′) Red_1 is a red.

This sentence expresses the fact that red_1 is identical to some red instance in the class of red instances. Moreover, (2) and (2′) are grounded in a more basic relation that founds the inclusion of red_1 in the class of red instances. This more basic relation is expressed in (3).

The state of affairs described by (3) contains an "is" of exemplification or predication. The "is" in (1) and (2) are expressions of predication in a loose and popular sense and not in a strict, philosophical sense. This is because the "is" in (1) and the "is" in (2) are grounded in a more basic relation. Sentence (1) is grounded (in part) in (2), and (2) is grounded in (3). The "is" in (3) refers to a basic, undefined, irreducible nexus of exemplification. Sentence (3) expresses the fact that the universal, redness, is connected to a bare particular (or, perhaps, some other individuator) in red_1 by the nexus of exemplification. This nexus of exemplification is inhomogeneous in that it relates two entities that differ categorically; a universal and an individuator. So redness is in an individuator (which is in red_1) in that redness is predicated of or "tied to" that individuator.

This, then, is a sketch of a traditional realist assay of property-instances that: maintains true universals; grounds the individuation of property-instances by making them complex entities with an individuating constituent in them; and clarifies three important states of affairs and their associated "ways of being in". For traditional realists, neither the universal nor the exemplification nexus are spatiotemporal entities. Moreover, in the case of Socrates and Plato, the exemplification nexus connects an abstract entity with a spatio-temporal one.

Four advantages of the traditional realist view

At this juncture, recall Johanna Seibt's assertion that "since the basic relation of a Platonist theory of predication, i.e., exemplification, cannot be defined in naturalist terms, a nominalist theory of predication proves to be '. . . the very foundation of a naturalist ontology'".[1] Among other things, the critiques of Campbell, Wolterstorff and Armstrong in Chapters 3 and 4 have focused on their analyses of predication (i.e. exemplification). It may be helpful to compare the traditional realist account of properties, predication and property-instances with the views of Armstrong and Campbell. For present purposes, Wolterstorff's position may safely be set aside since it is indistinguishable from Campbell's in the areas to be mentioned. There are at least four advantages to the traditional realist assay of a property-instance when it is compared to views like those of Armstrong or Campbell.

First, a universal F-ness must be brought together with its instances in such a way that they can be called F. Redness must be "tied to" its instances so as to make them red and not bare entities (or green for that matter). The traditional realist assay of property-instances explains why red_1 is red and not bare (or green). Red_1 is red because the universal, redness, is in it as one of its constituents and redness is the colour of red_1. Prima facie, Armstrong's view succeeds on this score, but Campbell's does not.

Secondly, the traditional assay of red_1 clarifies the relation between redness and red_1 in a way that is not found in views that liken this relationship to a set membership relation (Campbell) or a "being wholly spatially located at the same place as" relation (Armstrong). These treatments of this relation leave unclear

precisely how the "universal" is really related to its instances. Sets are not in their members. Moreover, given that many philosophers believe that two entities can be at the same place at the same time without one being a constituent of the other, Armstrong's spatialized rendition of exemplification is not sufficient. As it stands, it provides no account of how the universal is *in*, and not merely co-located with its instance.

By contrast, the traditional realist sketch presents the universal as a constituent *in* its instances and, thus, treats this relation along the lines of part/whole relations. This part/whole relation involves a more deeply grounded relation between redness and the individuator in red_1. Admittedly, this relation is basic and undefined. But it can be viewed as a tie or a link between two entities. Moreover, the response to the claim that this version of "immanent relational realism" falls prey to Bradley's regress argument is one that Armstrong himself admits is hard to refute: it is a unique feature of relations (including exemplification) that they can relate relata without needing other entities to relate them to those relata.

Thirdly, the traditional realist account presents red_1 as a complex entity with two constituents that serve to ground both the universality and the particularity of red_1. By contrast, instances for Campbell and, on an earlier and less charitable reading, for Armstrong, are simple entities without further entities in them. In a way that should now be familiar, this move leaves the abstract particular as a universal (red), a bare particular (1), or some unclarified entity that somehow sustains both functions without grounding either. Armstrong's latter, clarified views do, indeed, analyse the property-instance as a complex state of affairs, although it treats the property and, perhaps, the truth-maker for a property's potential for being saturated, as spatiotemporal entities located at the place of the property-instance. This does allow Armstrong to ground both the universality and individuation of property-instances, but in a way that is problematic for his naturalism and otiose from a traditional realist standpoint.

Finally, the traditional account explains how it is that the universal transcends its instances. The universal is indifferent to any particular instance (a Platonist would add *all* its instances) since the universal can be a constituent *in* many instances through the non-spatiotemporal, inhomogeneous nexus of exemplification. When

redness has red_1 as one of its instances, this is due to the fact that some entity (a bare particular) outside the nature of redness has entered into an exemplification relation with redness. Something happens to redness, namely, it is modified and becomes exemplified. Thus, redness transcends its instances. If a universal is just a set of tropes (Campbell) then the universal cannot transcend its instances because the identity conditions for sets are constituted by the members of those sets. Change the membership and you change the set. Wolterstorff says that his kinds do, in fact, transcend their cases, but since he takes kinds to be a some sort of unity of cases as members of the kind, it is not clear how the kind can exist without the members that belong to and constitute it. Armstrong's views are clearer than Campbell's in this regard because he can claim that a universal transcends a specific instance in that it is wholly present at the same location as its other instances. However, this solution goes against the axiom of localization and for those who accept that axiom, Armstrong's model of transcendence will be problematic.

Realism, moderate nominalism and Husserlian property-instances (moments)

The traditional realist account presented above includes, as an essential element, the existence of property-instances. However, some philosophers, such as Reinhardt Grossmann, claim that if philosophers accept property-instances in addition to properties and concrete particulars, they are moderate nominalists. Grossmann puts the argument this way:

> A certain view about the nature of properties has had a grip on the minds of many philosophers. According to this view, the whiteness of billiard ball A is not the same thing as the whiteness of billiard ball B. Each ball has its own whiteness, so that we must distinguish between $whiteness_1$ and $whiteness_2$, $whiteness_1$ being the colour of A and $whiteness_2$ being the colour of B.[2]

Grossmann seems to think that if a philosopher uses definite descriptions like "the F of A" or "the F of B" to refer to non-identical entities, then that philosopher is a nominalist. In this

section, it will become apparent that Grossmann's claim is false. The mere fact that a philosopher does not accept the identity of the referent of "the F of A" and "the F of B" does not entail that the philosopher is a moderate nominalist.

As an application of this argument, Grossmann has attempted to show that Edmund Husserl was a moderate nominalist. Now, admittedly, students of Husserl are divided when it comes to stating his theory of universals. Was Husserl a realist or a moderate nominalist? On the realist side are philosophers like Dallas Willard who has argued that "it is obvious that Ideas (universals, 'species', essences) and the viewing and analyzing thereof form the substance of his entire philosophy".[3] On the moderate nominalist side there are those who would agree with Gustav Bergmann when he claimed that "Husserl made two major mistakes. For one, he is a [moderate] nominalist".[4]

The primary purpose of this section is to argue that a philosophical commitment to property-instances does not make one a moderate nominalist. To accomplish this goal, the main focus will be on the debate about Husserl because his views are valuable in their own right and they provide a test case for assessing the claims of philosophers such as Grossmann. Regarding Husserl, it will become apparent that he was realist. There are a number of issues relevant to proving this point. But the most important issue in the debate about Husserl's view of universals is his doctrine of property-instances; that is, moments. By focusing on different ways of assaying a Husserlian moment, the main issues in the realist/nominalist debate will become clear and the strength of the realist case will be enhanced.

From earlier chapters, it has become clear that nominalists treat property-instances (e.g. tropes) as simples. Moderate nominalism is a blob theory. When assaying a Husserlian moment, this will be called the simplicity view.

By contrast, a realist is one who holds that a universal is a multiply exemplifiable constituent *in* its instances. The universal is the essence of those instances and the ground of their resemblance with other instances of the same universal. Thus, two instances of redness, red_1 and red_2, are complex entities that have the same nature, redness, and they stand to that nature in a basic nexus, which is the tie of predication between the redness and an

individuator in each instance. Realism is a layer-cake ontology. When assaying a Husserlian moment, we will call this the complexity view.

One preliminary is in order. In what follows, it will be assumed that Husserl either assayed a red moment, red_1, as a simple entity or as a complex entity with redness, the nexus of exemplification, and an individuator in red_1 as constituents. But either view is mistaken if taken as the whole story of Husserl's treatment of a moment like red_1. For Husserl, a red moment will have, among other things, hue, intensity and saturation (and, perhaps, colour and extension) as constituents.

This fact is irrelevant for our purposes, however, since the current focus is on the nature of the universal, redness, how it relates to its moments and the problem of the individuation of red moments. These same issues could be raised for each of these constituents (except for colour and extension, which involve problems about the relationship between higher and lower order universals). So to simplify our investigation, hue, intensity and the like will be disregarded.

Would Husserl assay red_1 as a simple entity or as a complex entity? The debate may best be diagnosed by, first, considering arguments for the simplicity view.

Arguments for the simplicity view

Argument 1

Reinhardt Grossmann argues for the simplicity view based on a statement from *Logical Investigation II*, which can be paraphrased as follows.[5] We can concentrate our attention on the-green-of-the-tree before us. Let us assume this can be done in such a way that we become unaware of all of its individualizing aspects. In this case, the-green-of-another-tree (of the same shade) could be substituted for the-green-of-this-tree and we would not notice the difference. Nevertheless, inattention to the individuality of the-green-of-this-tree does not remove its particularity. Thus, the-green-of-this-tree is a particular and not a universal, and it is a simple entity which exists here and now, a moment of green.

Argument 2

Wolfgang Künne appeals to another argument from the second *Logical Investigation* to support the simplicity view.[6] The argument states that each geometrical fragmentation of, say, a green surface has its own green. Otherwise, we could not talk about the spread of a colour over a surface. For example, the green of the top half of the surface is not identical to the green of the bottom half even when they are the same shade. Thus, each fragmentation has its own green, $green_1$, $green_2$, . . . and these are simple particulars, viz. moments.

Argument 3

James Talvite cites yet another argument from *Logical Investigation II* in favour of the simplicity view.[7] The argument states that certain predicates are true of a species but false and absurd when applied to the moments of that species (and vice versa). For example, a green moment is located in space and time, is spread out, arises and vanishes, and so forth. But none of these things can be truly predicated of the species, green. Thus, green moments are particular entities which are simple.

Argument 4

The fourth argument is an argument from perception. It comes in at least two different forms, both of which proceed in two steps. In the first step it is claimed that moments, like red_1, can be the objects of normal acts of perception. In such acts, we see something particular that is located in space and time. The colour we see and everything about it is spatiotemporal. Indeed, what we see with our very eyes is always located in space and time. Thus, the colour we see is not a complex entity with two abstract entities (redness, exemplification) as constituents. Rather, it is a simple, viz. a moment. Advocates of both forms of the argument appear to be in agreement about the first step, but there are different moves made from here.

Some state the second step in this way.[8] Foes of moments must counter the argument of the first step by replacing moments with universals, independent particulars and exemplification. This strategy fails for two reasons: it does not provide an adequate account of cases where we clearly seem to see moments themselves; and it

often involves the absurd claim that we can see the universal in the concrete particular that somehow contains it, while maintaining at the same time that the universal remains outside space and time.

There is an alternative version of the second step.[9] If someone tries to combine a commitment to universals as abstract objects with a belief in moments, then the most plausible depiction of our knowledge of universals entails that moments are simples. Once this is done, the argument continues, the slide to nominalism is hard to avoid because "universals" become redundant and, in any case, they turn out to be mere abstract objects like sets or perfect particulars and not true universals, because they are no longer taken as multiply exemplifiable entities in their instances. What is the most plausible depiction of our knowledge of universals to which reference was just made? It is the view that upon seeing a red moment, the mind "turns elsewhere" so to speak and through rational intuition it "perceives" the universal that remains entirely outside the moment.

What does the perception argument have to do with Husserl? If successful, the argument shows that moments are simples. Once this is granted, universals become otiose and, in fact, they are no longer multiply exemplifiable entities. Since realism is a layer-cake ontology, this amounts to an abandonment of realism. Husserl may not have seen this in the early stages of his thought, but, the argument continues, he should have and, in any case, his slide towards nominalism is already underway with his introduction of property-instances; that is, moments.

There is a similarity in the first three arguments and a general response can be given to them. Simply put, phrases like "the F of *a*" are ambiguous and the mere presence of such phrases does little to show that their referents are to be taken as simple entities. For example, phrases like "the F of *a*", say "the redness of red_1", can be a way of referring to the universal, redness, *in* red_1 as opposed to the shape of red_1 or in contrast to a different shade of colour.

Secondly, "the F of *a*" can be taken to refer to a complex entity – redness, a tie of exemplification and an individuator. When a universal is exemplified by a particular to form a complex entity, then this complex entity is itself a particular. This is the victory of particularity. Similarly, if a universal is exemplified by a spatio-

temporal entity, the complex whole that is formed is itself spatiotemporal. The universal is "in" the complex whole, but this relation is not itself a spatiotemporal one nor is at least one of the entities it relates. Thus, the complex moment, red_1, can be a spatiotemporal particular without one of its constituents – the universal, redness – being a spatiotemporal particular.

So Husserl's arguments regarding moments can be granted without implying that moments like red_1 or $green_1$ are simple. Red_1 can be complex and his arguments could still hold. For example, two moments on the same surface, $green_1$ and $green_2$, are both particular and are not identical to each other even though the greenness *in* each is an identical constituent in both. Husserl may have used phrases like "the F of *a*" to refer to simples, but he did not have to use them in that way for arguments 1–3 to be cogent. And the mere presence of "the F of *a*" in these arguments cannot decide the issue, for they are ambiguous.

Regarding argument 1, Husserl could be making the simple point that a moment does not become a species by ignoring its particularity. Husserl could still consistently hold that the greenness in each green moment is a universal constituent in those moments, without denying that the moments themselves are numerically distinct particulars. Arguments 2 and 3 can be handled in the same sort of way.

However, argument 4 is a somewhat more difficult one for a realist. If a moment like $green_1$ is a complex entity, with greenness as one of the constituents *in* it, then when one sees $green_1$ it would be possible to "see" the greenness in $green_1$, at least in the sense of being directly aware of it in the moment. In other words, the complexity view implies that universals like greenness can be objects of acts of perception. They can be seen with the eyes, for in seeing green moments, it is the greenness in them that constitutes their colour.

Did Husserl hold that one can perceive a universal with the eyes? It would certainly seem that some statements made by him, which are often overlooked by advocates of the simplicity view, suggest a positive answer to that question. In sections 2–5 of part 1, chapter 1 of *Ideas I,* Husserl states that the essence of an individuum (a particular, a this-here) can be "found in the very own being" of that individuum. In fact, he seems to state clearly that a

universal is in the moment and that it can be seen in the moment as one of its constituents.[10] The Eidos, the pure essence of an individual "can be exemplified for intuition in experiential data – in data of perception, memory, and so forth".[11]

Taken at face value, it is hard to see what these statements mean if they are not understood along realist lines. As Dallas Willard has argued, according to Husserl one "can *find* – immediately recognize – the same element in many different individuals of the same kind which come before us in intuition".[12] It is true that for Husserl one may need to see several moments of the same universal before one can have an eidetic intuition of the universal itself. Nevertheless, in such acts of intuition it is the universal that which is seen as one and the same *in* each of its moments. Whether or not this view is absurd, it seems to have been Husserl's considered judgement about the matter. But because this is such an important topic for a realist ontology, a more detailed discussion of the "perception" of universals, including Husserl's position, will be presented in Chapter 6.

In sum, the arguments for the simplicity view listed above are not compelling and, in fact, an examination of the fourth argument has lead to some passages in Husserl that directly support the complexity view. Let us now turn to an examination of other arguments for the complexity view.

Arguments for the complexity view

The first argument has to do with Husserl's view of the genus/species relations that obtain between higher and lower order universals. In *Ideas I,* Husserl explicitly states that higher order universals are "contained inside" of the more determinate universals lying below them.[13] Elsewhere, he says that "the universal, red, is 'inherent' in the different nuances of red . . ., 'colour' is 'inherent' in red or blue".[14] He calls this relation of inherence a part–whole relation where the higher order universal is contained in the lower order universal.

In another passage in the *Ideas,* Husserl sheds more light on this relation through an example. He says, "Thus, for example, any tone in and of itself has an essence and, highest of all, the universal essence tone as such, or rather sound as such – taken purely as the

moment that can be singled out intuitively in the individual tone".[15] This seems to suggest that when an individual moment has an essence, it also has the higher order universals contained in that essence. A higher order universal, tone as such, is "in" the *infimae species*, which is the nature of this particular tone by virtue of the fact that a moment of the higher order universal is contained in the lower, more determinate, universal.

This interpretation is confirmed by a statement in *Logical Investigation III*: "The generic 'moment' of colour, for instance . . ., can only be realized in, a 'moment' of lowest difference such as red, blue, etc."[16]

Assume that redness is a first-order universal and that colour is a second order universal. Disregarding the constituents of hue, intensity and brightness, red_1 still cannot be a simple entity for it has, as one of the constituents in it, a moment of the second order universal, colour. Thus, red_1 is a complex entity and the simplicity view is wrong.

It seems that this argument has some value. At the very least, it shows that Husserl's view of the genus/species relations among universals is quite different from the $\in$ of set membership used by Keith Campbell, or the kind/case relation employed by Wolterstorff. For Husserl, the genus/species relation is a type of part–whole relation and, thus, red_1 is complex for Husserl in a way that is not true for Campbell and Wolterstorff.

Unfortunately, this is not the kind of complexity a realist wishes to attribute to red_1. The realist assays the complexity of red_1 so as to include at least one genuine universal which is multiply exemplifiable, redness. And many realists would hold that the second order universal, colour, is a numerically identical constituent in all first order universals that are colours. But the genus/species relation held to by Husserl makes no clear reference to a One-*in*-Many. A defender of the simplicity view could point out that it is a *moment* of colour that is in redness (which, in turn, is tokened by red_1), and this is not a true second order universal; a One-*in*-Many. It is, at best, a species that has many instances. Or a defender of the simplicity view could hold that Husserl accepted a constituent ontology in assaying the part–whole relations between higher and lower order universals, but abandoned that framework in his treatment of the relation between first order universals and their

moments. So this argument fails to establish the kind of complexity at the level of moments like red_1 involved in the complexity view.

On the other hand, the above statements by Husserl do seem to indicate that he did not reject a constituent ontology when he assayed the relationship between higher and lower order universals. If Husserl rejected such an ontology at this level, then greenness would not have a moment of colour *in* it; greenness would simply *be* a moment of colour. This would be consistent with a simplicity view analysis of a moment of $green_1$ wherein $green_1$ does not have a moment of greenness *in* it; rather, $green_1$ simply is a moment of greenness. Furthermore, while Husserl may have employed a constituent ontology for relations between higher and lower order universals, and abandoned that framework in his analysis of the relation between an *infimae species* and its moments, surely the burden of proof is on the simplicity view here. It is more natural and consistent to treat Husserl's view as a constituent ontology throughout.

There is a second argument for the complexity view based on Husserl's notion of foundation.[17] According to Husserl, colour and extension stand in a relation of foundation. That is, one cannot have a moment of some colour without there also being a moment of some extension. Instances of colour are necessarily associated with and require supplementation by an instance of extension. Consider the red, round spot, Socrates. Socrates is a whole with two dependent parts or moments, red_1 and $round_1$. These moments stand to each other in a relation of foundation. This relation is an a priori law of the essences or species of these moments, redness and extension. Husserl states the following: "Our discussions so far have shown that there is always an a priori law governing what is non-independent, having its conceptual roots in what is universal *in* the whole and part in question" (emphasis added).[18]

So the relationship between red_1 and $extension_1$ (which are dependent parts of the whole, Socrates) is determined by an a priori law of essence, which is grounded in the universals in those moments. Thus, a defender of the complexity view could argue that these relations between moments like red_1 and $extension_1$ are only true of these moments because they are laws relating to the universal essences that are constituents in them.

On the simplicity view, it is hard to see how the kind or species is brought together with or in the moment in such a way that the

former genuinely determines the nature of the latter. How does redness make red$_1$ red, if not by being the redness *in* red$_1$? Similarly, how can a priori laws governing the relationships that obtain between moments have anything to do with those moments unless they are laws pertaining to the essences of those moments, and unless these essences are constituents in those moments?

A defender of the simplicity view could respond by asserting that the species is *instanced by* its moments and this relation is just a basic, primitive relation. But this appears to be a mere assertion, and it simply leaves unclear how the essence of a moment makes that moment what it is. Since Husserl makes such important use of the a priori relations between moments and since he grounds these in laws having to do with the essences of those moments, then his view would be clarified and more consistent if he held that those essences were constituents *in* their moments. For then it is the essences themselves in their moments that are related by a priori laws, and not essences that are so related and then, somehow, instanced by those moments.

A third, and final, argument for the complexity view centres on some of Husserl's comments about individuation and ultimate substrates. Recall that on the simplicity view, a moment does not need to be individuated because its particularity is primitive. Its particularity and intrinsic nature differ by a distinction of reason and, given a denial of universal entities in the moment, no grounding of particularity is required. The same cannot be said for the complexity position. On this view, a moment has at least two constituents that are universals (e.g. redness and exemplification), so some account must be offered of what makes the moment a particular. Thus, the very act of providing such an account entails the complexity view.

In sections 11–15 of book I, part I, chapter I of the *Ideas I*, Husserl discusses genus/species relations and different hierarchies of being. In terms similar to those used by Aristotle, Husserl argues that as one ascends to higher and higher levels of universals, one eventually reaches *summa genera*. In descending, one finally reaches ultimate, formless substrates. These substrates are "pure, syntactically formless, individual single particulars".[19] He also says that these substrates are basic entities that cannot be broken down further, they are uncombined individuals, that is not composed of

properties or parts, and they cannot be derived by applying predicates to other entities. This seems to mean that they do not have properties contained within them, although for Husserl, these substrates will always have properties connected to them because on his view, they not self-sufficient and they are always found with properties.[20]

On a few occasions, Husserl describes these ultimate substrates by using the Aristotelian notion of *tode ti,* which for Aristotle has as its primary meaning something indivisible and one in number *(Cat.* 3b 10–114). Aristotle used *tode ti* to refer to forms, primary substances or prime matter. Husserl's main use of *tode ti* is to refer to an ultimate subject of predication that is itself formless and particular. His description of a *tode ti* reminds one of a bare particular for Gustav Bergmann, which, he said, was Aristotelian prime matter splintered.

In one very interesting passage, Husserl compares an ultimate substrate with a moment. He points out that an ultimate substrate is an "uncombined individuum"; something particular. Then he says this: "The quality-moment in itself 'has no individuality.' Is it accordingly an *essence?*" The passage is difficult to understand. But Husserl seems to be saying that a moment needs to have an ultimate substrate in it that is its ultimate subject of predication and that grounds its individuation. By "quality-moment in itself" Husserl seems to mean the quality-moment as quality. Thus, red_1 in so far as it is red is not particular. No account of individuation is given if we simply consider red_1 *qua* red.

Unfortunately Husserl's views here are unclear in just the same way that Aristotle was unclear. Aristotle was unclear about the form-instance relation. For example, in the category of substance, statements like "Socrates is a man" may contain an ungrounded "is" of classification that places a primary substance (Socrates) in a class, the secondary substance. Or Aristotle may ground this "is" in a more basic relation involving the predication of the form, humanity, of the matter in Socrates. The former represents a reading of Aristotle that is compatible with the simplicity view since, on this reading, Socrates is a simple, particular entity (disregarding accidents) and the universal, humanity, is like one of Wolterstorff's kinds. The latter is more in keeping with the complexity view since, on this reading, Socrates is a complex entity with these constituents

(disregarding accidents): the universal, humanity, the individuating matter in Socrates and the tie of exemplification.

It appears that Husserl is somewhat unclear in the same way. But his comments about individuation and ultimate substrates do seem to imply the complexity view, even if Husserl's explicit statements are not clear. For on the simplicity view, moments come individuated in and of themselves. The simplicity view rejects the part–whole framework in its treatment of a moment as a simple. Thus, the problem of individuation does not even arise. Only the complexity view requires some sort of ultimate substrate to ground the individuation of moments, and the fact that Husserl links individuation with such substrates implies that he accepts the part–whole framework for moments. And this is nothing other than the complexity view.

In sum, in this section the arguments for the simplicity view have been analysed and found to be inadequate. In addition, several arguments have been presented to show that Husserlian moments are complex entities. Husserl was a realist and his ontology included true universals, those multiply exemplifiable entities that are constituents in their instances.

6 Traditional realism: issues and objections

In Chapters 2 and 3, reasons were given for preferring realism over both schools of nominalism. In Chapters 4 and 5, different versions of realism were analysed, and traditional realism was clarified and defended. Still, there are objections to realism – traditional or otherwise – yet to be considered. Moreover, intriguing topics surface in developing a mature realist position on properties and their instances. It is impossible to cover all the relevant topics in one short chapter or, indeed, in one book. So the discussion to follow will be limited to subjects that regularly arise in the literature and that are interesting in their own right. The first section contains an examination of three arguments against realism and the second presents two issues that are part of a developed realist ontology, viz. the existence of uninstantiated universals and the relationship between properties and existence.

Three objections to realism

Three objections to realism surface frequently: realist vicious regresses, problems with identity conditions for properties and difficulties reconciling naturalism with knowledge of abstract objects.

The realist vicious infinite regresses

Three regress arguments have been raised against realists: the third man argument; an argument focusing on an ascending hierarchy of exemplificational properties; and an exemplification relational

regress argument. The third man argument was discussed in Chapter 1 and will not be examined here.

The hierarchy of exemplificational properties argument goes like this. According to realists, when some object a has a property being F, then this is to be explained as a exemplifying F-ness. Thus,

(1) *a* is F.

is analysed as

(1′) *a* exemplifies F-ness.

But if several objects, including *a*, have in common that they exemplify F-ness, then sentences like (1′) should be analysed as

(1″) *a* exemplifies the exemplification of F-ness.

Now the regress generated is a vicious infinite one, the argument goes, and, thus, a realist analysis of universals and their exemplification should be rejected.

Realists have responded to this argument by noting that while the linguistic expressions in (1) and (1′) are different ("is F" and "exemplifies F-ness"), they involve the same states of affairs. And the same point can be made for the expressions "exemplifies F-ness" and "exemplifies the exemplification of F-ness" in (1′) and (1″). When a number of objects agree in being F, that is, indeed, explained by those objects exemplifying F-ness. But nothing further is involved in noting that several objects exemplify F-ness. When several objects exemplify F-ness, it is not because they all exemplify the exemplification of F-ness, but rather, because they all exemplify F-ness, they all stand in the nexus of exemplification to F-ness. And, claim realists, that ends the regress.

The next regress argument also involves exemplification and is similar to one raised against the existence of relations by F. H. Bradley. According to Bradley, before relata *a* and *b* can be related, they must enter into relation R with each other. But before *a* or *b* can be related to R, each must stand to R in some relation R′ and R″, respectively, and on to infinity.

Similarly, when *a* is F, then the realist will say that this is because *a* stands in the exemplification relation with F-ness. Thus, a univer-

sal can be possessed by a particular only by entering the exemplification relation with that particular. But, now, on a realist view the exemplification relation is itself a universal and in order for it to relate *a* to F-ness, exemplification must itself be exemplified. However, this means that exemplification itself must stand to *a* and F-ness in some other exemplification relation to ensure that exemplification itself can function to relate *a* to F-ness. Call the relation between *a* and F-ness "exemplification$_1$". Before exemplification$_1$ can do its job of relating *a* to F, exemplification$_1$ must be exemplified and, given the nature of exemplification, this means that exemplification$_2$ must exist. The function of exemplification$_2$ is to ensure that *a* and F enter into the exemplification relation (exemplification$_1$).

In the case of Bradley's famous argument against relations, philosophers have responded by claiming that, just as one does not need superglue to connect two objects to normal glue in order to tie them together with normal glue, so relations are the sort of things that do not need to be related to their relata before they can relate those relata to each other. In the same way, realists point out their account of exemplification (when *a* is F it is because *a* is related to F-ness by way of another entity, exemplification) does not apply to exemplification itself. The exemplification relation does not need to be exemplified by way of another, higher order exemplification relation before it can connect *a* to F-ness. As a primitive metaphysical fact, exemplification is an unmediated linker of properties to other properties or to particulars. In order to capture this feature of exemplification, realists sometimes call it the nexus of exemplification rather than the relation of exemplification.

Identity conditions for properties

Some philosophers argue that compared to sets, the identity conditions for properties are obscure and, therefore, properties, including realist depictions of them, should be rejected. There are clear, extensionalist identity conditions for sets: sets A and B are identical just in case they have exactly the same members. But, the argument continues, no such identity conditions exist for properties. Sometimes this argument is associated with the slogan "No entity without identity!"

Unfortunately, the argument and the slogan it specifies is ambiguous and can be interpreted in either an ontological or epistemological way. Understood, ontologically, "no entity without identity" expresses the following:

N_0: Necessarily, for all entities *e*, *e* exists if and only if *e* is indentical to *e*.

Understood in this way, N_0 seems both clearly correct and hardly a problem for the realist. The realist can simply apply a modified version of Leibniz's law of the indiscernibility of identicals to universals themselves:

LL_U: Given universals U_1 and U_2, U_1 is identical to U_2 if and only if for every possible world, W, U_1 and U_2 have all and only the same properties in W.

To be sure, LL_U requires that properties themselves have properties, but this seems to be the case, and those realists who employ arguments from abstract reference for universals would appear to embrace the fact that, e.g. redness has colourfulness as a property.

Additionally, the argument may be interpreted epistemologically:

N_E: We are not justified in believing in some entity *e* unless we have clear identity conditions, stated in terms of necessary and sufficient conditions, for judging whether or not *e* is present or, given *e* and some other entity *f*, whether *e* is identical to *f*.

So understood, N_E appears to be an expression of epistemological methodism according to which one cannot know (or be justified in believing) that P, unless one knows (justifiably believes): some criterion Q that expresses how it is that one knows (justifiably believes) that P; and that P satisfies Q.[1] According to methodism, one must know how one knows before one can know and if one cannot answer the sceptical question of how one knows, then one is defeated by the sceptic. By way of application, unless identity conditions can be given that satisfy N_E, we are not justified in believing in properties and no such conditions have been forthcoming.

What is the realist to say in response to this argument? The best strategy is for the realist to adopt epistemological particularism according to which there are some particular items of knowledge (or justifiable belief) that one can know (justifiably believe) without knowing how one knows them, without the need for criteria for knowledge. According to the particularist, the sceptical question of how people know what they know is a heuristic guide for insight, for extending knowledge from clear paradigm cases to borderline cases. This is done by surfacing from clear cases certain criteria for knowledge (which are justifed from prior knowledge of the clear cases and not vice versa), and employing these criteria to borderline cases in order to extend knowledge. On this view, the realist could admit that in some cases (e.g. heat and mean kenetic energy) we may not have clear identity conditions that satisfy N_E. But it does not follow from this that we do not have knowledge of properties. For example, we know what redness is and we know directly that it is different from sourness, blueness or being even.

Even if this response is adequate to rebut the critic, N_E does surface the need for the realist to develop criteria for property identity as a part of a mature realist ontology. Realists have responded to this need and the following have been suggested as adequate. Properties P and Q are identical just in case:

(a) *The course grain criterion:* P and Q are, or perhaps, are necessarily coextensive.[2]
(b) *The causal criterion:* P and Q confer the same causal or nomological powers on their spatiotemporal instances.[3]
(c) *The semantic criterion:*
- "P" and "Q" are names of properties and they are either synomymous or were used to fix the reference for the same property at the initial baptism of the two terms; or
- "P" is a property name and "Q" is a definite description for a property (or vice versa) and "P" names the only property that has the property of satisfying the description of the property expressed by "Q"; or
- if "P" and "Q" are descriptions of properties, "P" refers to the property R (the property of satisfying the description expressed by "P"), "Q" refers to property S (the property of

satisfying the description expressed by "Q"), and the only property that has R has S and conversely.[4]

(d) *The intentional inclusion criterion*: P and Q include and involve each other.[5]

Most realists have not accepted (a) or (b), although philosophical naturalists have been especially favourable towards them. Several arguments have been raised against the course grain criterion. It wrongly identifies distinct, contingently co-exemplified or unexemplified properties (e.g. being red and being wavelength alpha, being a Martian and being a Vulcan), it similarly fails to distinguish necessarily co-exemplified properties (being triangular, being trilateral), and it confuses a property with the set of things that have the property. Criticisms of the causal criterion have included the fact that it wrongly rules out the existence of contingently uninstantiated properties (being a Vulcan) and necessarily uninstantiated properties (being square and round), it wrongly denies the existence of causally impotent properties (being even, being a prime number), it renders epiphenomenalism not merely false, but necessarily false, and it rules out what is clearly possible and may, in fact, be actual, viz. distinct properties that satisfy the criterion (being red, being wavelength alpha; being a pain, being C fibre Φ).

The semantic criterion needs a bit more elaboration. As expressed above, it presupposes that names are rigid designators that refer to the same entity in all possible worlds in which it exists and that definite descriptions are non-rigid designators that refer to whatever contingently satisfies the description. With this in mind, examples of "P" and "Q" for the three disjuncts, respectively, are "blue"/"bleu," "blue"/"the colour of the sky," and "the colour of the sky"/"Aunt Sally's favourite colour." Many realists have taken the semantic criterion to express a sufficient condition for property identity. For example, if "blue" names the only property that has the property of satisfying the description of being the colour of the sky, then identity of property obtains. However, it is not at all clear that the criterion is necessary and some philosophers have been dissatisfied with the idea that an appeal to linguistic reference or meaning is required to make sense of property identity.

The intentional inclusion criterion is somewhat complicated, but to gain a basic grasp of the criterion, the notions of inclusion

and involvement must be explained. These are different relations that properties may sustain to each other:

- *Inclusion:* Property P includes property Q = Df. P is necessarily such that whatever exemplifies it exemplifies Q.
- *Involvement:* Property P involves property Q = Df. P is necessarily such that whoever conceived it conceives Q.

Inclusion requires it to be the case that the very same entity that exemplifies a property must also exemplify the property it includes. Determinates (being red) include their determinables (being colourful). Regarding involvement, these four properties involve (but do not include) the property of being red:

- being either red or round
- being nonred
- being possibly red
- wanting something to be red.

None of these four include being red – something could be red or round without being red. But they all involve being red. For example, someone who conceives of the property of being red or round also conceives of the property of being red. Now on the intentional inclusion criterion, inclusion and involvement are individually necessary and jointly sufficient for property identity. Inclusion is clearly a necessary condition for property identify and, as such, it is uncontroversial. The adequacy of involvement as a second condition is more in dispute. Evaluating this condition would require us to investigate the nature of conceiving and other mental states and many philosophers today eschew intentional criteria for ontological commitments. Still, the intentional inclusion criterion does an adequate job of getting the right answer for most properties and the reader is invited to try to generate a counterexample to it. In any case, this, along with the other three criteria are the central realist attempts to develop their ontology of universals.

Naturalism and knowledge of abstract objects

Suppose we take naturalism to be the view that the spatiotemporal physical universe of entities studied by science, especially the hard sciences, is all there is. Everything that exists is located in space and time and is part of the efficient causal system known as the cosmos. On this view, human persons are material objects and various epistemically relevant states (e.g. perceptual states) are to be understood in terms of human persons (i.e. certain physical objects) standing in scientifically describable efficient causal relations with the "objects" of those states. Since knowledge or justified belief entails a causal connection between the subject and object, for two closely related reasons, abstract objects must be rejected. First, the causal relata must be in space and time. Since properties taken as abstract objects are both causally inert and not in space and time, they cannot be construed as entering into such causal relations and, thus, cannot be objects of knowledge or justified belief. Secondly, any attempt to account for knowledge of abstract objects will have to be given in terms of some mysterious, even mystical, aphysical "grasping connection" and such an entity and the sort of subject required to have the capacity to employ it cannot be part of an appropriate naturalist ontology.[6]

In response, it is open to a realist to say that if naturalism is inconsistent with traditional universals and knowledge thereof, then so much the worst for naturalism. It often happens in philosophy that one person's *modus ponens* is another's *modus tollens*. Many, though not all philosophers have agreed that traditional realism and naturalism are incompatible. We have seen a number of reasons for this in earlier chapters, but here is a summary of the reasons most frequently cited:

1. *Traditional properties and spatiotemporal location:* Some have offered a sort of "argument from queerness" against traditional realist properties to the effect that they are entities of a very strange sort, utterly different from anything else in the universe as depicted by the contemporary naturalist. Some have developed this argument by focusing on a special class of universals (e.g. propositions, axiological properties); others have claimed that no physicalist or naturalist non-reductive account of deep, metaphysical modality is possible and, thus,

traditional realist properties and their relations to each other are utterly different from the rest of the naturalist ontology.

2. *Traditional properties and being:* Some argue that traditional realist properties violate the causal criterion of existence since they are non-spatiotemporal entities and remain that way even when exemplified. Moreover, given the non-spatiotemporal nature of properties, it becomes hard to see why their existence is dependent on being exemplified. Thus, it is argued, uninstantiated universals exist and they clearly violate the causal criterion of being.
3. *Traditional properties and exemplification:* Traditional realism is a classic example of a "two world" ontology and, as such, it becomes difficult to explain in naturalist terms how there could be any kind of connection between abstract objects on the one hand and the spatiotemporal world of particulars and events on the other. Moreover, because the exemplification relation nexus is non-spatiotemporal and connects entities from different "worlds", it is hard to see how the nexus itself bears a relevant similarity to strictly physical entities. In this regard, the exemplification nexus presents the same sorts of problems to naturalists that Cartesian interaction and emergent/supervenient relations do to weak naturalists (e.g. where does Cartesian interaction take place and where is the predication relation exemplified?). The so-called explanatory gap between physical and mental events/properties has a parallel between spatiotemporal entities and those completely outside space and time. Finally, since at least in some sense, property-instances are ontologically dependent on their properties (they are modally distinct from each other), and since those properties are not themselves physical, if we take events as temporal states of affairs, the dependence of everything that exists or occurs on physical factors in the physical domain becomes hard to maintain.
4. *Traditional properties and the naturalist epistemology:* As noted above, it is hard to accommodate traditional realist properties to physicalist depictions of human cognizers and of the causal interactions that constitute cognitive processes such as perception. Given this depiction of humans and their various epistemic relations to things outside them, it is hard to see how we could have cognitive access to traditional realist properties.

Given that 1–3 provide reasons for thinking that traditional realism is inconsistent with naturalism, the realist should not be troubled by argument 4. Still, realists need to give some account of the knowledge of universals and their connections to each other. Many such accounts have been forthcoming. It may be useful to present two of them offered by Laurence Bonjour[7] and Edmund Husserl[8] to illustrate, respectively, non-perceptual and perceptual realist attempts to respond to this need.

Bonjour queries why we think that some relation of influence isn't there, just because there is no efficient causal relation between a subject and an abstract object such as a traditional universal. Why think that the only way to enter a relation of influence is like individual physical particulars do? Why think that redness and greenness must be concretely involved in causal chains like physical particulars before one can know what they are and that, necessarily, nothing can be red and green all over at the same time? It would be enough if the causal chain contained objects that instantiated the relevant properties. By analogy, claims Bonjour, abstractive theories of concept formation (e.g. Aristotle's) fit in here. This may not be causal influence but it is influence none the less, so it suffices.

However, at this point a possible problem arises. If one construes "causal influence" as being closely analogous to sense perception (e.g. a direct grasping properties and relations themselves and on this basis judging the relevant propositions to be true) and, even if one admits that this account is in some sense metaphorical, it does require a quasi-perceptual account of rational insight. The problem is that cases of ordinary sensory perception of physical particulars do have as a necessary condition a causal relation between perceiver and perceived, but no such relation obtains in the case of knowedge of abstract objects. Thus, says Bonjour, the analogy with perception should be broken. But if this move is made, if one wishes to retain a rationalist defense of a priori knowledge of abstract objects, one must offer an account of rational apprehension that avoids the analogy with sense perception.

According to Bonjour, to have a rational apprehension of an object is just to think about or represent that object. The way one grasps/apprehends in rational insight is just to think about/represent an entity. By way of exposition, Bonjour invites us to consider one type of mental state: contemplating an object (i.e. having it in

the mind). In these cases, a subject is aware of the object of thought, of what it is they are thinking about. Now the question arises, how is one able to think about an object? In virtue of what is a mental state about (e.g. triangularity)? What it is to be aware of the content of one's own thought, to grasp what one is thinking about? In essence, Bonjour's answer is that it is to have an intelligible conception of the object of one's thought. For this to be the case, some element of thought must be intrinsically meaningful and this is relevant to the defense of moderate rationalism in several ways, one of which is this: the idea of intrinsic thought content suggests how the abstract object involved in a priori justification can be accessible to the mind without appealing to a perceptual or quasi-perceptual view that raises anew the causal objection.

By way of elaboration, Bonjour starts with three initial aspects of such an account:

- It will be hardcore metaphysics unpopular to post positivists. We need an account of properties/relations as traditional universals and as objects of thought and of the intrinsic features of thoughts such that the latter are directly accessible.
- We should not limit ourselves to materialism/naturalism in our approach and, in fact, the account can be used in a reductio against them.
- Such an account will need contents that represent properties (and not just particulars).

How does a thought simply by virtue of its intrinsic meaning come to be about or have as an element of its content a specific universal? According to Bonjour, only one answer seems available: the property itself is somehow metaphysically "involved" in the intrinsic character of the thought. But we can't just say the thought instantiates the property as Aristotle/Aquinas did. Admittedly, says Bonjour, Aristotle and Aquinas did say that thought and object have the property in two different ways and that notion is in the right direction. Focusing on Aquinas, there are two different interpretations of his view:

- The mind and object exemplify the same property but the exemplification relation is different in each case. Bonjour

rejects this as a plausible position on the grounds that there seems to be only one exemplification relation, not two.

- The relevant intentional universal and the universal in the object are different and not identical, even though they are intimately related entities.

Bonjour believes that this second interpretation is on the right track. On Bonjour's account, the realist should make the property of the object a component or ingredient or constituent of the thought without saying it is instantiated in the thought. For example, is it by virtue of a thought instantiating a complex universal that "involves" the universal, triangularity, in the appropriate way, viz. as an "ingredient" of the thought without being instantiated in the thought, that the thought is about triangular things. In this way, claims Bonjour, we can give an account of knowledge of universals without depicting the apprehension of universals as a perceptual relation analogous to visual perception that somehow reaches out into the Platonic realm.

The purpose here is to present Bonjour's view and not to offer a detailed critique of it. Still, four problems may be briefly mentioned. First, it is not clear that the essence of the comparison between visual perception and rational intuition involves a causal relation, or even some weaker causal-type influence, between the subject and the object. As a contingent empirical fact, this may be a physically necessary condition for normal acts of visual perception of embodied persons, but there needs to be some argument that rational intuition requires something of the sort and Bonjour gives none. Below, Husserl's account will be described according to which the parallel between sensory and rational intuition is made with no reference whatever to causal connections.

Secondly, Bonjour appears to conflate grasping an object and being aware of the content of the thought directed on the object. The various constituents of a mental act, along with the other mental entities that are associated with it and that direct the act towards an object are not the same thing as the object of the act. Put differently, it is plausible to think that neither objects of mental acts nor the constituents (properties, parts) of those objects are constituents of the acts directed on those objects. Nor does it seem necessary to make a constituent of the object be a

constituent of a mental act to explain how an act can be directed on an object.

Thirdly, Bonjour never explains how it is that the relevant property of the object gets into the mental act in the first place. Perceptual models of rational intuition, such as Husserl's described below, do just that and Bonjour's non-perceptual account is the weaker for failing on this score.

Finally, it is entirely unclear how a property can be a constituent of a particular (e.g. a concrete particular, a moment, or an event) without doing so by way of exemplification. Throughout history, the overwhelming majority of realists have agreed that *qua* universals, properties are the sorts of things that enter other things by way of the nexus of exemplification, even though they have differences about the precise nature of exemplification itself. It would be desirable to find a plausible account of knowledge of universals that avoids the introduction of a entirely new and unclear notion of how universals are in things. Such an account was proffered by Edmund Husserl.

Husserl's account of knowledge of universals is a perceptual one and he believed that people could "see universals with their very eyes". This phrase is ambiguous, but it seems to mean that while focusing one's attention on a moment (a Husserlian property-instance), one can directly perceive the universal in the moment. The direct perception of a universal is, on this view, a different mental act from an ordinary perception of a moment, but it in no way involves attending to something outside the moment itself. Indeed, it is while the eyes are on the moment that the universal is originarily given as a constituent of the moment in what Husserl called eidetic intuition, the direct grasp in intuition of a universal itself.

Given this interpretation of "seeing universals with one's very eyes", it seems that Husserl did, in fact, believe one could see a visual universal like redness with one's very eyes. There are five aspects of eidetic intuition and its relationship to ordinary sensuous perception of a particular relevant to our discussion:

- The universal itself is "in" – although not spatiotemporally in – the moment.[9]
- We directly preceive the universal via eidetic intuition. Eidetic intuition is precisely parallel to ordinary perception in that

through an eidetic intuition the universal is directly perceived, it is placed immediately before the subject.[10]

- Compared to the ordinary perception of a particular, eidetic intuition is a new mode of apprehension. While founded on ordinary perception (i.e. a necesssary condition for the obtaining of a mental act of eidetic intuition is the obtaining of the relevant mental act of ordinary sensory perception), eidetic intuition has its own unique act character, and as it is directed to the moment itself (or, perhaps, the concrete particular), though in an essentially different manner than in ordinary perception, the universal is placed before the subject.[11]
- The visual universal is perceived with the eyes while looking at the moment itself (or, perhaps, the concrete particular).[12]
- The universal is not only in the moment, it is also perceived in the moment and perceived to be in the moment.[13]

This is a précis of Husserl's account of knowledge of universals. Some philosophers argue that perceptual accounts such as Husserl's involve the absurd claim that people can see the universal in the concrete particular or property-instance that somehow contains it, while maintaining at the same time that the universal remains outside space and time. Perhaps this is a sort of argument from queerness to the effect that even if Husserl held to this position, he should not have done so because of the highly counter-intuitive nature of the position itself. What should be made of the absurdity claim?

A defender of Husserl could offer two responses, one phenomenological, one ontological, to weaken the alleged counter-intuitiveness of Husserl's position.

Phenomenologically, if a philosopher claims to have a direct awareness of some entity, another philosopher can always claim not to have that awareness. When G. E. Moore claimed to have a direct intuition of goodness, his rivals simply denied they had the same intuition. A defender of Moore could respond in this way. Goodness is a second order property like being coloured or being shaped, not a first order property like pleasure, being red, or being triangular. Now intuitions of first order properties such as these have a certain texture or vivacity that is absent in the case of intuitions of the corresponding second order properties. Those

who failed to have the relevant intuition of goodness were looking for the sort of intuitive texture appropriate to intuition of a first order property and they never found it. Unfortunately, they were looking for the wrong sort of phenomenology. Once an intuition of goodness is compared to the intuition of other second order properties, it becomes more plausible to think that the relevant intuition is real.

Now the same sort of thing may be going on regarding eidetic intuition. Husserl himself warned against depicting eidetic intuition as a feeling of conviction, tainted with a certain affective colouring.[14] The reason some philosophers may find absurd the claim that in eidetic intuition one has an intuition of an abstract object non-spatiotemporally "in" a moment while looking at that moment is that they fail to find the relevant affective colouring. But if eidetic intuition is real it is wrong to look for such colouring and it is also wrong to compare the phenomenology of eidetic intuition with the more vivid nature of a sensory perception of a moment.

If the charge of absurdity is ontological, then it probably amounts to the claim that it just seems absurd to think that one can see an abstract object while looking at a moment in space and time. By way of response, recall the modal distinction introduced by Francis Suárez. Suárez says the modal distinction intervenes between an entity and its mode. He illustrates this by saying that the modal distinction obtains between the property known as quantity and the-inherence-of-quantity-in-a-specific-substance. A mode is a dependent, inseparable, genuinely distinct entity from what it is a mode of. If a modal distinction obtains between two entities A and B (where B is a mode), there is non-identity between A and B and inseparability in this sense: A can exist without B but not vice versa.

Given Suárez's description, it is easy to see a modal distinction between a property and its property-instance taken as a complex moment. Now when one attends to a moment, one attends to something precisely as a spatiotemporal particular. But when one attends to the universal in the moment, one attends to a property simpliciter. When a perceiver is inclined to describe his experience with language appropriate to a particular (e.g. by noting the location of the object) then the relevant object is the moment. But when the perceived describes the object in terms of property talk (e.g. this

object is bright red, it is darker than orange, it is a colour) then no reference is being made at all to space, time, or particularity. Moreover, it is because the universal is directly present that one is able to describe it with the relevant property-talk. When one is tempted to say that the universal is also located right here and now, he is now attending to the universal's mode, the moment, whether or not he realizes it.

Two issues: uninstantiated universals and the nature of existence

Besides objections, there are two topics of importance in developing an adequate realist ontology: the existence of uninstantiated universals and the relationship between properties and existence.

Platonism vs. Aristotelianism

While Plato and Aristotle were realists, they disagreed about an issue of central concern to realists. As a question of historical accuracy, scholars differ about the precise nature of the clash between these great figures, but in the schools of thought that arose after them, three different interpretations have been given to the disparity between Platonists and Aristotelians regarding universals:

1. Are there uninstantiated universals – universals not exemplified by a particular – or does the existence of a universal depend on at least one particular instantiating it?
2. Do universals remain outside or are they in the being of the things that have them?
3. Do universals remain outside the things that have them in some spatial location, a Platonic heaven, or are they spatially in the being of the things that have them?

Platonism and Aristotelianism may be identified as the view which embraces, respectively, the first and second options in each question.

It is important not to conflate these three questions. The relationship between 2 and 3 is pretty clear. An answer to 2 is a necessary condition for an answer to 3 since a position on 3 is one way to

spell out a commitment to a view on 2. If a philosopher holds that universals are in the things that have them, then they may or may not believe the former are spatially in the latter.

The relationship between 1 and 2 is not so clear. It has seemed obvious to most philosophers that if universals remain outside the things that have them, then universals are "indifferent", as it were, to the existence of things exemplifying them and, thus, there are uninstantiated universals. But from there, the issues are pretty obscure. It is possible to hold that universals are in things and also affirm either that there are or are not uninstantiated universals.

D. M. Armstrong is one philosopher who conflates 1 and 2, and as a result, draws an egregious conclusion. Says Armstrong,

> Once you have uninstantiated universals you need somewhere special to put them, a "Platonic heaven," as philosophers often say. They are not to be found in the ordinary world of space and time . . . [I]t seems that Platonic theories of universals have to treat particulars as bloblike rather than layer caked. I think this is an argument against Platonic theories."[15]

Armstrong argues that a Platonist answer to 1 entails a Platonist answer to 2 and 3 and this, in turn, implies a blob theory of the things that "have" properties. But this is simply false. In itself, belief in uninstantiated universals says nothing about the way instantiated universals relate to the entities that instantiate them and a commitment to uninstantiated universals is consistent with a layer-cake analysis of those entities. Many philosophers, myself included, combine a form of Aristotelian immanent realism regarding 2 with a Platonic realism regarding 1.

Since topics central to the analysis of 2 and 3 were discussed throughout Chapters 4 and 5, the rest of this section will examine the debate about 1. Are there or are there not uninstantiated universals? Before we look at arguments on both sides, a further clarification about 1 needs to be mentioned. Assume, with most realists, that there are higher order universals that are properties of lower order properties (e.g. colourfulness). Now, does colourfulness obey Platonic or Aristotelian constraints? Can colourfulness exist unexemplified? The answer depends, at least in part, on what is meant by "unexemplified" in this context. If "unexemplified"

means "unexemplified simpliciter", then, arguably, colourfulness is Aristotelian because there is no possible world where colourfulness is not instantiated by being red, being green and so forth. However, if "unexemplified" means "unexemplified by a particular" – it could exist even if no particular exemplifies colourfulness or any determinate under it – then, arguably, it should be understood in Platonist terms. Historically, the second interpretation has been the one central to the debate and, accordingly, 1 is framed in terms of instantiation by particulars.

There are four main arguments for Platonism. The first one draws attention to what appear to be certain necessary truths regarding universals; for example, redness is necessarily such that it is a colour, it resembles orange more than it does blue, and so on. These truths are employed by realists in the argument for universals from abstract reference. If we ask whether or not for some universal, U, there is a possible world, w_1, such that U exists in w_1 but no particular exemplifies U in w_1, these necessary truths seem to imply an affirmative answer. These truths, the argument goes, have truth-makers in worlds where there are no relevant particulars, and the truth-makers are the properties that exist in those worlds. "Redness is a colour" is true in a world without red objects, and this is because redness exists and is a colour in such a world.

Aristotelians may respond to this argument by denying that there is a truth-maker for these truths, or at least for the modality attached to them, they may interpret necessary truths as functions of language or as expressions of the "ungiveupableness" of certain beliefs in certain linguistic groups, and so forth, rather than as expressions of the way the world is. Or they may simply deny that these truths are necessary. We cannot pursue the details of the ensuing dialectic here, except to make two brief points. First, the relevant propositions do, indeed, seem to be necessary truths, not contingent ones. Secondly, in their response, the Aristotelian must be careful not to employ arguments that they have rejected when arguing for realism in the first place; that is, in rejecting the idea that truths don't need truth-makers or in resisting the tendency to reduce properties and exemplification to mere linguistic phenomena.

The second Platonist argument claims that in a number of ways, the knowledge we have of paradigm case universals provided sufficient insight into their nature to know that their existence does

not depend on being instantiated by a particular. Appeal is often made to two specific sorts of knowledge about universals. For one thing, if we pay attention to the intrinsic nature of redness and compare it to the coming-to-be and parishing or altering of red particulars, we learn that redness, and universals in general, are ingenerable, incorruptible, timeless and unchangeable (except in there relational features). Red particulars come-to-be and so forth, but it is a mistake – indeed, a category fallacy – to apply these notions to the universal itself. For any propositions that asserts of a universal that it comes-to-be, parishes or alters, there is a true reductive paraphrase that applies these notions to the relevant particular(s). These different notions are a central part of what realists take themselves to know in the very contrast between universals and particulars.

For another thing, if we pay attention to redness and its relationship to the particulars that exemplify it, we learn that the existence of concrete particulars depends on their having properties, but not vice versa. That is why we know that if a red object is annihilated, we do not need to look at the stop sign on the corner to be sure it hasn't lost its colour. We know that redness still exists and is instantiated by all the other red particulars in spite of the demise of the particular red object within our purview. We also know there is nothing special about this very red object in this regard. Redness could continue to characterize all the other red objects no matter which particular one went out of existence. For this reason, we know that the existence of redness is independent of any specific particular and there is no reason to think that its existence depends on any particular whatever. The claim is not merely that just because some entity P can exist without the existence of any particular member of some group, x_i–x_n, one can infer that P can exist without some member of the group existing. Rather, the claim is that by attending to properties and the particulars that have them, we learn that the existence of the former is not dependent on the existence of the latter, and that is the justification for the confidence we have that some other particular can continue to possess that property even if a specific particular goes out of existence.

Aristotelians may respond that these claims are simply false and question-begging. Or they may offer a view of universals that runs contrary to the alledged knowledge claims of the Platonist. For

example, D. M Armstrong likens properties to Fregean concepts: properties are unsaturated entities "hungry" for particulars and, in fact, are constituents of states of affairs along with particulars (e.g. for universal F and particular *a*, F is a constituent of the state of affairs of *a*'s being F) such that properties cannot exist without the existence of the relevant states of affairs. Again, space considerations forbid a detailed analysis of this dispute. Suffice it to say that for Frege, even though concepts are unsaturated and "hungry" to be filled with particulars, they could exist unsaturated, and, in general, when some state of affairs contains constituents (e.g. separable parts), those constituents can, and often do exist without those states of affairs existing.

A third Platonist argument points out that most universals have not been exemplified at all times. In general, if some universal U is exemplified by some particular at time t_1, then there were times t_i–t_j prior to t_1 such that there were no objects that exemplified U. Surely, there are some colours that have only recently come to be exemplified. But then, it seems more reasonable, argues the Platonist, to hold that at t_1, U came to be exemplified than to believe that U came into existence. Thus, during t_i–t_j, U existed unexemplified.

In response, D. M. Armstrong has advanced what he calls the principle of instantiation: for each property P, there exists (not necessarily now) some particular *x* such that *x* tenselessly has P.[16] According to Armstrong, the principle should be understood as ranging over all times and in connection with a rejection of Presentism (the view that only the present moment exists) and of an A series view of time in favour of both a B series position and a view of concrete particulars as perduring entities. Thus, it is enough for a property to exist that there is at least some time at which it is instantiated.

A Platonist could respond that the principle of instantiation does, indeed, depend on a rejection of Presentism and, thus, its appeal is limited accordingly. If Presentism is true, it is very hard to see how the existence of some colour unexemplified up to the present moment (and the fact that it is necessarily true that it is a colour) depends on its being exemplified at some time in the future that does not currently exist. Moreover, it is hard to conceive of the mode of existence of that colour prior to its exemplification with-

out rendering it an abstract object. Of course, this point will not be a strong one for those, like Armstrong, who reject Presentism.

Finally, a Platonist can argue that, given a certain view of existence itself, it can be shown relative to that view that uninstantiated universals continue to satisfy the conditions for existence. The relationship between universals and existence will be briefly analysed below. But for now, if one supposes for the sake of argument that an entity exists just in case there is at least one property such that the entity has that property, then the Platonist can argue that, say, redness still has the property of colourfulness, and thus, it exists, even if no red particulars exist. Clearly, the appeal of this argument depends on the adequacy of the relevant theory of existence and, it could be argued, given the widespread disagreement about the nature of existence itself, this argument is weak indeed.

Arguments in favour of Aristotelianism, at least as they appear in the contemporary literature, may be adequately presented in précis form. Most of them turn on epistemological commitments, especially some form empiricism, and on naturalist commitments. Aristotelians argue that universals need to be anchored to the space–time world and Platonic universals are free floaters that violate this constraint. If universals are not so anchored, then they fail to satisfy a causal criterion of being, there can be no cognitive access to them because no causal interaction with them is possible, and they require an unparsimonious two-world ontology. Moreover, we are far more certain that exemplified universals exist, as opposed to unexemplified ones, and, thus, the burden of proof is on the Platonist and that burden has not been met. In response, the Platonist can reject the epistemological or naturalist commitments that underlie these arguments and they can either reject the claim that the Platonist owns a burden of proof or reply that the Platonist arguments meet that burden.

Properties and the nature of existence

In closing out the chapter, it may be instructive briefly to look at one philosophical topic where the employment of properties has been illuminating: the relationship between existence and properties.[17]

The study of the history of the philosophical discussion of the nature of existence itself surfaces three important lessons:

- There is a difference between existing and not existing.
- That difference is not the same thing as a thing's essence (assuming for the purposes of illustration that there are essences).
- That difference is not to be identified as an ordinary property of some sort.

There are five different traits that a good theory of existence ought to have. For one thing, it needs to be consistent with and explain what actually does and does not exist. Secondly, it needs to be consistent with and explain what could have existed but either does not exist or is not believed to exist (perhaps falsely) by the person advocating a given view of existence. For example, even though unicorns do not, in fact, exist they could have existed and a theory of existence needs to account for this fact.

Thirdly, a theory of existence must allow for the fact that existence itself exists. As an implication, a theory of existence must not be self-refuting. For example, if someone claims that to exist is the same thing as being inside space and time (existence itself is being spatiotemporally located), then on certain views of space and time, they would not themselves exist since they are not inside space and time. Whatever existence amounts to, one thing is clear; it makes a real difference in the world and it must itself exist to make such a difference. If existence itself does not exist, then nothing else could exist in virtue of having existence.

Fourthly, a theory of existence must not violate the fundamental laws of logic – the laws of identity (P is identical to P), non-contradiction (P cannot be both true and false at the same time in the same sense) and excluded middle (P must be either true or false). Contradictory states of affairs, e.g. a square circle or it is now raining in Grandview and not raining in Grandview, do not exist. Moreover, something must either exist or not exist and nothing can exist and not exist at the same time.

Fifthly, a theory of existence must allow for the existence of acts of knowing. Since a theory of existence is a theory, it will depend for its rational acceptability on knowledge that people have. Now an act of knowing something is, among other things, a conscious act of a person. Thus, any theory of existence that denies that conscious persons who know things can exist will be a false theory of existence.

Several theories of existence have been offered: To exist is to be:

- located in space and time
- physical
- causally efficacious (i.e. capable of being an efficient cause or of being acted on by an efficient cause)
- an event or a bundle of events
- perceived or a perceiver
- a property
- a property of properties (e.g. a second order property of first order properties).

The point here is to illustrate and not criticize various theories of existence that have been proffered in the history of philosophy. Throughout the history of philosophy, one theory of existence has been prominent. In my view, this theory is false but a near miss and it is instructive to consider it in more detail. Many thinkers (e.g. Plato and Descartes) have held that existence is a property in the same sense that redness or being square is a property. For a ball to be red is for it to have the property of redness; for it to exist is for it to have the property of existence. Now at first glance, something seems right about this proposal. We do say, quite appropriately, that the ball *has* redness and that it *has* reality as well. In some sense, then, things can be said to have or not have existence.

However, something seems wrong with this proposal too. Existence is simply not a normal property like redness. This point was made by Immanuel Kant (1724–1804) in *Critique of Pure Reason* (A 600/B 628):

> By whatever and by however many predicates [properties] we may think a thing – even if we completely determine it – we do not make the least addition to the thing when we further declare the thing *is*. Otherwise, it would not be exactly the same thing that exists, but something more than we had thought in the concept; and we could not, therefore, say that the exact object of my concept exists.[18]

Kant's point can be understood in this way. When you think of a ball, it adds to your conception of the thing to be told that it is red.

But it does not add to your conception of the ball to be told that it exists. Put differently, saying that a ball is red tells us something about the character of the ball. But saying that it is real says that the ball, with all of its properties, does in fact exist. Thus, existence does not relate to the ball like being red does.

Kant seems right here; nevertheless, saying that the ball is real does add something because there is, in fact, a real difference between existence and non-existence. Can we shed more light on what this difference is? Perhaps so. Consider the statement "Tigers exist". This would appear to assert the following: (i) the property of being a tiger (ii) belongs to something (an individual tiger, say Tony). It seems clear that the "belonging" is the nexus of exemplification. The claim that tigers exist is the claim that the *essence* of being a tiger (the *what* of being a tiger) is actually exemplified by or belongs to something (the *that* of an individual tiger).

Note that when "tigers exist" is broken down into the two aspects above, (i) refers to the essence or nature of being a tiger and (ii) expresses reality or existence. From this we learn two things. First, there is a difference between a thing's essence and its existence. Knowledge of what a tiger is does not tell us that tigers exist. There is a fundamental difference between essence (whatness) and existence (thatness).

Secondly, existence is not a property *which* belongs, but is the *belonging of* a property. Existence is the entering into the exemplification nexus and, in general, the following characterization of existence seems to fit the five features of a theory of existence: *existence is either the belonging of some property or the being belonged to by a property*. In the case of Tony the tiger, the fact the property of being a tiger belongs to something and that something has this property belonging to it is what confers existence.

How does this view square with the five features of a theory of existence? It would seem to account for everything that does or could exist and that does not exist. Things that exist have properties, things that do not exist don't have a property. Since unicorns could have existed, this means that the property of being a unicorn could have belonged to something. It would also account for existence itself existing because the belonging-to (exemplification, predication) relation is itself exemplified (Tony and the property of being a tiger both enter into this belonging relation) and the

belonging-to relation exemplifies other features (e.g. it has the properties of being a relation and being abstract). Finally, this view of existence does not violate the fundamental laws of logic nor does it rule out the existence of acts of knowing.

In sum, we have learned three things so far from our brief discussion of existence:

- There is a genuine difference between existing and not existing.
- This difference is not a normal property like the property of being red.
- Existence is not part of the essence or whatness of ordinary entities, i.e. for ordinary entities there is a difference between essence and existence.

There are two further remarks to be made about existence. First, our characterization of existence above will allow us to specify some other notions: *coming-to-be* and *perishing*. Since we already have an idea of what existence itself is, and since coming-to-be and perishing involve gaining and loosing existence, then these latter notions can be understood in terms of our general theory of existence itself.

- E comes into being =Df. There is at least one property which is such that E has that property and there is no property which is such that E had that property.
- E perishes = Df. There was at least one property which was such that E had it and there is no longer any property which is such that E has it.

When something comes into existence, there must be at least one property that belongs to that thing. For example, when a human being comes-to-be, then the property of being human belongs to that individual at that moment. When something ceases-to-be, it no longer has any properties whatever. Coming-to-be and perishing should be kept distinct from what philosophers call *alteration*. An example of an alteration is when an apple goes from sweet to sour. Alterations are types of *change*. Before change is possible, two things must be true: the thing that is changing must

exist; and the thing that changes must exist at the beginning, during the process, and at the end of change. In the example above, the apple exists and continues to exist while it is sweet, during the time it changes to being sour, and while it is sour. An alteration is a case where a thing changes in the properties it has; it is not a case where something changes with respect to existence itself. Alterations presuppose and, therefore, cannot be the same thing as a change in existence itself.

A second remark about existence is this: *nothingness* is just that – nothing. Nothingness has no properties whatever. Things that do not exist have no properties. For example, the unicorn Pegasus has no properties and that is why he does not exist. It may be thought that he has the property of being a one-horned horse. But that is not true. Our *concept* of Pegasus (which is in our minds when we are thinking of Pegasus) is a concept *of* something that would have the property of being a one-horned horse if it existed. The property of being a unicorn may well exist, but Pegasus the particular does not exist and he, along with all other cases of nothing, have no properties.

In this chapter we have looked at some objections to realist views of properties, examined the debate between Platonists and Aristotelians regarding the existence of uninstantiated universals, and glanced at the usefulness of an ontology of properties for a theory of existence. The focus of Chapters 1–6 has been squarely on properties. In Chapter 7, particulars will be investigated, specifically the problem of the individuation of particulars in light of a realist construal of properties.

7 The individuation of particulars

In recent years, a growing number of philosophers have appealed to various individuative entities (e.g. tropes or Leibnizian essences) to solve a specific philosophical problem. Moreover, the problem of individuation is an essential aspect of the problem of universals. For these reasons, it is important to be clear on issues and options in the problem of individuation. In this chapter, the problem of individuation will be clarified, two solutions will be analysed and bare particulars will be defended as the best answer.

The problem of individuation

The notion of a problem of individuation has come to be used for a wide variety of different, and not altogether related matters in philosophy ranging from linguistic, conceptual or epistemological issues of singling something out at or through time to more distinctively metaphysical concerns. To clarify the specific sense used here, recall Socrates and Plato, two red, round spots that share all their pure properties in common. The problem of individuation is the problem of offering an ontological assay of the situation so as to specify what it is that makes the two spots two particular, individual entities instead of one. So understood, this problem of individuation requires an answer to two different but intimately related questions:

- How are we to characterize individuality ontologically? To what ontological category or logical type does individuality belong?

- What sort of distinction is there between the individuality and nature of an individual like Socrates or Plato: a real distinction, a modal distinction, a distinction of reason, or some other distinction?

One's answer to the second question will depend on the solution given to the first.

It seems obvious that external relations (e.g. spatiotemporal location on relational accounts of space–time), cannot solve the problem of individuation since by their very nature, external relations presuppose and, therefore, cannot constitute their relata. Some philosophers have taken an absolutist view of space and time and offered coordinate qualities as individuators. For two reasons, this solution will not be investigated. First, if successful, it implies that the spots cannot move and endure and that there is no possible world in which they could have been located at different locations. This is highly counter-intuitive because location seems to be something external to the being of the spots. Second, coordinate qualities themselves share properties in common and the need to individuate them is not solved by the coordinate quality position.

Those who do try to solve this problem do so in terms of one of the other theories of individuation to be discussed below. The best way to get at those solutions is by means of the following four propositions:

(1) The only constituents of objects are their properties.

(2) Pure properties are numerically identical in their instances.

(3) $(x)(y)[(z)(z \text{ is a constituent of } x \leftrightarrow z \text{ is a constituent of } y) \rightarrow x = y]$.

(4) Necessarily, $(x)(y)\,[(z)\,(z \text{ is a pure property of } x \leftrightarrow z \text{ is a pure property of } y) \rightarrow x = y]$.

Propositions (1)–(4) pose a problem because (1)–(3) entail (4) and (4)is the assertion that the identity of indiscernibles is a necessary

truth when construed as a statement about pure properties. And most philosophers think that the identity of indiscernibles is false.

Proposition (3) (the principle of constituent identity) is fairly uncontroversial once we get clear on what a constituent is. Virtually all philosophers accept it.[1] Proposition (3) employs a notion of "constituent" that ranges over parts, separable and inseparable (e.g. Husserlian moments), properties, internal relations within some whole, and, indeed, all entities whatsoever that enter into the being of some whole. It is hard to see how two entities could share literally *all* their constituents in common and still be two. Those who reject (3) reject the entire project of giving ontological assays of complex entities and they would owe their critics an account of what it is for something to be a constituent of something else. Moreover, even if someone holds that the world consists entirely of simples, this would not be a solution to the problem of individuation; it would amount to a rejection of the problem itself.

Different solutions to the problem of individuation will focus on propositions (1), (2) and (4). Proposition (1) entails a bundle theory of substance. So understood, it is meant to exclude bare particulars. Advocates of bare particulars as the proper solution to the problem of individuation, such as Gustav Bergmann and E. B. Allaire, reject it. Proposition (2) expresses a realist construal of properties as multiply exemplifiable entities that are identical in all their instances. Moderate nominalists reject (2) and try to solve the problem of individuation by embracing a view of qualities as abstract particulars. In Chapter 3, reasons were given for rejecting moderate nominalism, including its view of individuation. A further solution to the dilemma of individuation is to accept (1)–(3) and reject (4) on the grounds that impure properties or Leibnizian essences (e.g. the property of being identical to Socrates) are among the constituents of Socrates and Plato expressed in (3). Thus, Socrates and Plato each has its own impure property as an individuator. Alvin Plantinga is the chief advocate of this position.[2]

In sum, advocates of bare particulars reject (1), nominalists reject (2), virtually everyone accepts (3) and proponents of Leibnizian essences accept (1)–(3) but deny that (4) follows because they reject the notion that pure properties exhaust the sorts of properties a particular has; impure properties are the proper individuators. Since moderate nominalism has already been

evaluated, the remainder of the chapter shall focus on Leibnizian essences and bare particulars in that order.

Analysis of different views of individuation

Leibnizian essences

Statement of the view

The first main contemporary solution to the problem of individuation is the view that Leibnizian essences (e.g. the property of being identical to Socrates for the human being, Socrates) are what individuate. Alvin Plantinga has been the chief advocate of this position.[3] Because Plantinga uses "Socrates" as a term for referring to the man Socrates and not to a spot, the discussion will follow Plantinga's convention while his views are in focus.

Since Plantinga's views on possible worlds are well known, space considerations make it prudent to mention here only three of his more specific statements relevant to individuation. The first is Plantinga's characterization of an individual essence or nature: E is an individual essence if and only if there is a world W in which there exists an object x that: has E essentially; and is such that there is no world W* in which there exists an object distinct from x that has E.[4] Plantinga uses the following locutions for the essence of Socrates: "the property of being Socrates", "the property of being identical to Socrates", "the property of being identical to that very person, Socrates, in the actual world", "Socrateity". This property is something Socrates must have to exist and that nothing else could have had. So understood, the property of being identical to Socrates is what individuates Socrates.

Secondly, the relationship between Socrates and his individual essence is predication: Socrateity is something Socrates *has*, *exemplifies*, *instantiates*. Plantinga also says that individual natures are the thisnesses of individual objects. An unexemplified essence becomes a thisness when it is exemplified. An unexemplified essence essentially has the property of being a thisness if exemplified. How does an unexemplified essence become a thisness when it is exemplified? It does so because it stands in the "is the thisness of" relation with the object exemplifying it; for example, Socrateity

stands in the "is the thisness of" relation to Socrates very much like one's brother-in-law stands in the "is the brother-in-law of" relation to one.[5] Moreover, while there are no merely possible objects that exist simpliciter (for Plantinga, to say that an object x exists in W is to say that if W had been actual, x would have existed), individual natures can and many do exist unexemplified.

Finally, how does Plantinga see the relationship between the identity relation and an individual essence? He begins his answer to this question by inviting us to consider the following proposition:[6]

(5) Everything is identical with itself.

Plantinga claims that (5) predicates of each object the property of self-identity and this property is a common one. Next Plantinga considers what he takes to be an instance of (5):

(6) Socrates is identical with Socrates.

This proposition predicates two things of Socrates – the property of self-identity and the property of being identical with the thing that actually is Socrates. These properties do not characterize all and only the same objects and are, therefore, distinct. But they do "coincide on" Socrates; Socrates cannot have one without the other.

Evaluation

What should one make of this theory of individuation? For three reasons, it does not seem to be adequate. First, Michael Loux and Kit Fine have raised different variants of the following objection against Leibnizian essences.[7] Loux and Fine claim that Leibnizian essences are circular and they presuppose the very entities they are meant to individuate. Let us focus on Loux's argument. Loux claims that a property, P, is impure just in case there is some relation, R, and some substance, s, such that necessarily, for any object, x, x exemplifies P if and only if x enters into R with s. Loux's definition should be amended so as to replace "some substance, s" with "some particular, s" because he means something very specific by a substance and one need not assume his notion of substance to characterize an impure property. Now Loux claims that since

impure properties "incorporate" determinate particulars, then those properties cannot be used to individuate those particulars. Rather, those particulars are constituents of impure properties.

Loux's argument may be clarified by defining the notion of ontological constituent-dependence as follows: *x* stands in an ontological constituent-dependence relation to *y* just in case both the existence of *x* entails in the broadly logical sense the existence of *y* and *y* is a constituent of *x*. Now the problem is that Leibnizian essences are ontologically constituent-dependent on the entities they are suppose to individuate and this cannot be because if the former are to serve as individuators of the latter, then, for example, Socrates should be ontologically constituent-dependent of Socrateity and not vice versa. However, if one does a constituent assay of the entities that compose being identical to Socrates, one will have to include the individual Socrates in that assay. And if that is the case, something must already individuate Socrates ontologically prior to his being a constituent of Socrateity. Why? The problem of individuation involves giving an account of the constituents of an entity (including the entity itself for those like Campbell who reject the constituent-whole framework) that serve to individuate it. Thus, those constituents are not ontologically constituent-dependent on the entities they individuate.

A second and closely related point is this: whenever P is predicated of *x*, then P and *x* exist independently of each other in the sense that each is what it is and can be characterized as such without reference to the other. But this is not the case with Socrates and the property of being identical to Socrates, so Leibnizian essences violate what is true of predication in general. And unless there is strong justification for embracing a subclass of properties that neither are multiply-exemplifiable nor fit the general pattern of predication, one should stick with what we know to be true of properties in general. It is question-begging to claim that Leibnizian properties are such a special sub-class of properties if there is a reasonable alternative theory of individuation available that does not require this move.[8]

But what about case of essential predication, for example where an infimae species is predicated of an individual substance? Is this not a counter-example to the claim above about predication since Socrates cannot exist and be characterized without reference to

humanness? There is an effective response to this counter-example that employs the existence of bare particulars. For the sake of argument, let us grant the existence of such entities. Later, their reality will be defended in some detail. Consider the following two sentences:

(7) Socrates is human.

(8) This (bare particular) is human.

Sentence (7) should not be taken to assert a strict and philosophical notion of predication, but only a loose and popular one. It says that humanness is an essential constituent of Socrates where humanness is that entity that grounds Socrates's membership in the natural kind being human. But (7) is grounded in (8) and (8) asserts a strict sense of predication: humanness is predicated of a bare particular to form a this-such, Socrates. Humanness grounds Socrates's suchness and a bare particular individuates him. And neither humanness nor the bare particular in Socrates requires reference to the other entity to be characterized.

Finally, Plantinga's account of individuation amounts to a simple assertion of particularity and it does not offer a metaphysical ground for it. On Plantinga's account, just exactly what is it that has Socrateity? More specifically, what is it that stands in the "is the thisness of" relation to Socrateity that transforms an unexemplified essence into a thisness? The answer cannot simply be Socrates as a whole substance because this explains neither the particularity of Socrates nor that to which Socrateity is tied to form Socrates. Plantinga admits that the individual Socrates is not identical to the Socrateity he exemplifies. Ontologically, what is it that grounds the difference? Plantinga faces the same difficulty here that confronts philosophers such as Wolterstorff who claim that individual members of natural kinds just come individuated. Such a position does not ground but merely asserts individuation and this assertion is especially egregious in light of the fact that neither infimae species nor Liebnizian essences are identical to the individuals that possess them and the latter contain the former as constituents.

Plantinga has responded to arguments similar to these, although they are not precisely the points just made. For example, Kit Fine

raises a similar, but importantly different objection against Plantinga. Roughly, his point is that an actualist ontology containing unexemplified essences but no existent possible objects is incoherent because in such a view, the task of characterizing those unexemplified essences involves reference to the non-existent and a non-existent entity cannot stand in a relation to an existent one or be used to characterize it. Plantinga responds by offering a conditional characterization of an unexemplified essence in terms of a non-existent object: an unexemplified essence essentially has the property of being a thisness if exemplified. Even if Plantinga's response works against Fine's objection, it fails as a response to the one's just raised against Plantinga's theory of individuation for reasons already noted. It is one thing to characterize an unexemplified essence in terms of a feature it has that is relevant to what would be the case were it to be exemplified. Such a conditional is perfectly intelligible. But it is another thing to appeal to the very entity (e.g. Socrates) that being identical to Socrates is supposed to individuate. Such an appeal suffers from circularity and the other problems already mentioned.

Moreover, in his response to Fine, Plantinga considers the problem of whether or not haecceities are ontologically dependent on the objects whose haecceities they are.[9] The only point he makes relevant to criticisms about individuation is this: those who claim that haecceities are ontologically dependent on the objects they involve seem to take it that contingent objects like Socrates are constituents of properties that are somehow "plugged into" those properties. But this is false since properties are abstract objects. However, Plantinga's response fails to deal with the real issue. The issue is not that abstract entities like properties have contingent beings as constituents. On this, Plantinga is surely correct. The problem is how Plantinga's own account of haecceities can avoid this conclusion. All he does is assert that this picture of properties is absurd and, by implication, that his view does not entail this picture. But in light of the arguments raised above about the nature of impure properties, predication, and the grounding of thisness for exemplified essences, it is not clear that Plantinga can get off the hook that easily. Until these problems are solved, one should look for a better theory of individuation.

Bare particulars as individuators

Statement of the view

What exactly is a bare particular? According to Gustav Bergmann's classical definition,

> Bare particulars neither are nor have natures. Any two of them are not intrinsically but only numerically different. That is their bareness. It is impossible for a bare particular to be "in" more than one ordinary thing . . . A bare particular is a mere individuator . . .It does nothing else.[10]

Bergmann's statement implies three things about a bare particular:

1. It is not a property or a relation, but rather, a numerically primitive individual of logical type zero in Bertrand Russell's sense.
2. It does not "have" a nature nor does it "have" any properties at all.
3. Its only role it to be an individuator.

Proposition 1 is fairly straightforward and clear. Socrates and Plato are two individual spots that differ from each other because each has its own bare particular that individuates it and that differs from the properties in Socrates and Plato by more than a mere distinction of reason. Bare particulars constitute the "this" and the "that" of Socrates and Plato and are called "bare" to distinguish them from other particulars (e.g. events, primary substances, quality-instances, or in this case, the spots themselves). As it stands, proposition 2 is ambiguous because, as will become evident shortly when objections to bare particulars are examined, there is a sense in which they do have properties and a sense in which they do not.

Three qualifications need to be made about proposition 3. For one thing, bare particulars have been called on to serve a number of metaphysical roles in addition to individuation: the unifier and possessor of all a primary substance's properties (e.g. Locke's view of substance), the ground for the concreteness of an ordinary thing if properties are taken as abstract entities, that which accounts for the endurance of a substance through intrinsic qualitative change.

This chapter follows Bergmann and is concerned with bare particulars only as individuators. Thus, arguments against the adequacy of bare particulars in the other roles are irrelevant to the question of individuation.

Secondly, it is important to point out that bare particulars are *ultimate* individuators and are not *directly* responsible for all cases of the individuation of particulars. To take a simple example, if we assume that mereological wholes such as artifacts are individuated by their physical stuffs or parts, then we get a hierarchy of individuation. This very table is individuated by this very wood, this very wood is individuated by these specific atoms and molecules, and so on until we reach bare particulars as ultimate individuators. The fact that bare particulars can occasionally serve as indirect and not direct individuators is due to the victory of particularity: assuming a realist construal of properties as universals, when some particular *a* exemplifies a property F, the resulting state of affairs – *a*'s being F – is itself a particular. This point will not be developed further and the chapter will continue to talk simply of bare particulars as individuators, but it is important to recall that an overall theory of individuation can appeal to a number of other particulars (e.g. states of affairs) as long as it is kept in mind that bare particulars are crucial entities in any adequate overall theory of individuation.

Thirdly, there is a difference between theories of individuation for particulars like events, quality-instances, or primary substances and theories of individuation for, say, the various properties (e.g. redness, blueness) constituted by the same second order universal to form a quality order. Various theories of individuation have been offered for determinables under a determinate, including bare particulars. But it is possible to hold a bare particular theory of individuation for particulars and not for universals because, it could be argued, whatever individuates blue from red, given that they both have being coloured as their determinable, must leave the resultant state of affairs (e.g. blueness is this colour) as either an abstract state of affairs or a universal, and when bare particulars individuate, they turn their individuated states of affairs into concrete particulars. Again, this topic will not be pursued further. The present concern is the relevance of bare particulars as individuators of particulars.

Objections against bare particulars as individuators of particulars. The main criticisms against bare particulars as individuators have been summarized and advocated by Michael Loux[11] and, more recently, by Joshua Hoffman and Gary S. Rosenkrantz.[12] These criticisms are variants of four main objections. The first is clearly the weakest and it comes from empiricist constraints on analytic ontology: bare particulars are ontological posits that go beyond what is empirically sensible or testable. This objection was a forceful one in the days of Bergmann and his disciples because they lived in a time when forms of positivism were still alive and, in fact, they themselves subscribed to a version of empiricist epistemology. E. B. Allaire's response to this objection involved making a familiar distinction between knowledge by acquaintance and knowledge by recognition. He went on to argue:

> Consider once more the two discs. When presented together, they are presented as numerically different. That difference is presented as is their sameness with respect to space, (shade of) colour, and so on. What accounts for that difference are the numerically different individuals. No character nor group of characters can do that. Thus, to say that they are individuals is to say that things may be merely numerically different. No matter what description one proposes, the numerical difference of two things which are alike in all (non relational) respects must be accounted for . . . To claim that both discs are collections of literally the same universals does not account for the *thisness* and *thatness* which are implicitly referred to in speaking of them as *two* collections. That is, the two collections of characters – if one persists in speaking that way – are, as presented, numerically different. Clearly, therefore, something other than a character must also be presented. That something is what proponents of the realistic analysis call a bare particular.[13]

Allaire's response is to claim that we do have empirical knowledge of bare particulars by acquaintance even if we do not have the ability to recognize those bare particulars at a later time. Does Allaire's response work? It would seem not and the reason has to do with the victory of particularity. It is clear that in looking at Socrates and Plato

one is acquainted with two particulars and not just with universals. But it may be that the particularity with which one is acquainted is just the two particular states of affairs themselves, namely, Socrates and Plato, and not with the bare particular in each that grounds their particularity. So from the fact that one is presented with numerically different spots along with their differentness, it does not follow that we are presented with the constituent that accounts for the thisness and thatness of each. An argument from acquaintance should not be as ambiguous as this when it comes to stating just what it is with which we are acquainted.

Does it matter that Allaire's argument is not clearly successful? Probably not. Today, most philosophers would not place the type of empiricist constraints on analytic ontology that was present in Bergmann's day. The real issue for bare particulars is whether or not the arguments for and against them are sufficient to justify their adoption as a solution to individuation, not whether they are sense perceptible. Probably more than anyone else today, D. M. Armstrong allows empiricism to shape his work in analytic ontology, but in Chapter 4, it was seen that on the most likely interpretation, he adopts bare particulars as individuators.

The second objection against bare particulars is the claim that the notion itself "is incoherent and self-contradictory".[14] At least four reasons have been given for this claim:

1. It is a necessary truth that any entity exemplifies properties yet bare particulars exemplify no properties. Why think that this is a necessary truth? Two reasons suggest themselves. Either it follows from one's overall theory of existence itself or else from a generalization of the second argument to be given momentarily. The issue of existence will be addressed in the fourth major objection against bare particulars below (and in Chapter 6.) Thus, the response to this first point will be made in connection with reason 2.
2. Bare particulars are suppose to have no properties, certainly no properties necessarily, yet there are many properties they have and have necessarily: being concrete, being particular, transcendental properties like being coloured if green, being the constituent of at most one entity, having the property of lacking properties.

3. One cannot grasp or apprehend or conceive something that doesn't exemplify properties so bare particulars fail in this respect.
4. It is a necessary truth that if a property P inheres in x, then x exemplifies P. Thus, given the fact that bare particulars must have properties that inhere in them (e.g. the properties listed above or the property of being such that properties can subsist or inhere in a bare particular) the notion of a particular being bare is incoherent.

These objections fail because they either express gross misunderstandings of bare particulars or else they beg a serious question. Before arguing this directly, it is worth noting that some of the properties listed above are suspect to say the least. Arguably, what grounds the truthfulness of the proposition "x is coloured if x is green" is not a property, but a state of affairs constituted by a determinable (being coloured), a determinate (being green), and a genus/species relation. Nor, arguably, are there negative properties. The fact that a bare particular lacks some property F is not grounded in the fact that it possesses the negative property of not-F. As a primitive fact, it simply lacks F itself.

More importantly, advocates of bare particulars distinguish two different senses of being bare along with two different ways in which something can have a property. First, an entity is bare if and only if it has no properties in any sense. Bare particulars do not exist unless they possess properties, so they are not bare in this sense. Why this is so is a problem that will be addressed in the fourth objection below. There is another sense of bare, however, that is true of bare particulars. It can be clarified by considering the way a classic Aristotelian substance has a property, say, some dog Fido's being brown. On this view, Fido is a substance constituted by an essence which contains a diversity of capacities internal to, within the being of Fido as a substance. These capacities are potentialities to exemplify properties or to have parts that exemplify properties. The capacities are grounds for the properties like brownness that Fido comes to have. When a substance has a property, that property is "seated within" and, thus, an expression of the "inner nature" of the substance itself. Recognizing this, Richard Connell correctly distinguished the way substances and bare

substrata have properties by noting that properties are not simply tied to substances, but rather "rooted in . . . and caused by the substance".[15]

By contrast, bare particulars are simple and properties are linked or tied to them. This tie is asymmetrical in that some bare particular x has a property F and F is had by x. A bare particular is called "bare", not because it comes without properties, but in order to distinguish it from other particulars like substances and to distinguish the way it has a property (F is tied *to* x) from the way, say, a substance has a property (F is *rooted within* x). Since bare particulars are simples, there is no internal differentiation within them. When a property is exemplified by a bare particular, it is modified by being tied to that particular. Thus, bare particulars have a number of properties (e.g. being red) and they have some properties necessarily (e.g. particularity) in the sense that a bare particular can exist only if it has certain properties tied to it. Now, this fact about bare particulars neither makes them identical to their properties nor does it entail that properties are constituents within a bare particular.

So advocates of bare particular agree that they have or exemplify properties. This means that reasons 1, 2 and 4 fail to show that bare particulars are "incoherent and self-contradictory". These objections trade on the confusion just mentioned. But perhaps my claim is premature because there is another argument against bare particulars contained in these objections: when a bare particular has a property, this is grounded in a capacity for that property contained within the inner nature of the bare particular. For example, when a bare particular has a property that is "inhering in" it, this fact must be grounded in the further fact that the bare particular has the property of being such that properties can inhere in them.

It should be clear that this objection is question begging. It is open to an advocate of bare particulars to claim that it is a primitive fact that properties are tied to them and this does not need to be grounded in some further capacity or property within them. In analytic ontology, one eventually comes to primitives and, on the bare particular view, *qua* simples, bare particulars and the role they play as individuators are primitives. Thus, there is no need to ground the inherence of properties in a bare particular by way of

some further entity within it when we recognize that "inhere in" is taken as "tied to".

This leaves reason 3. One cannot grasp, apprehend, or conceive of something that doesn't exemplify properties. First, one should distinguish apprehending, which amounts to being acquainted with something by means of a sense perception, from conceiving, which does not involve imaging or sensing, but merely conceptually grasping something. Now it may be the case that one cannot apprehend a bare particular that has no properties. But one can easily conceive of a bare particular in itself as a pure, primitive individuator without having to conceive of the properties tied to it, once one recognizes the distinction between the bare particular, considered in itself as a simple, and the properties accidentally or necessarily tied to it. But more importantly, even if it is granted that such conceivings are impossible, it only follows that one can conceive of bare particulars only by grasping them through their properties. It does not follow that they are identical to those properties or that bare particulars cannot be bare in the sense we are using.

So much, then, for objection two. Here is a third argument against bare particulars. According to Hoffman and Rosenkrantz,

> if ordinary objects require substrata as individuators, why don't substrata themselves require some entity in order to individuate them? Properties can't individuate them, for they have none. Whatever else might serve to individuate substrata (i.e. something other than further substrata, e.g. location) would serve to individuate ordinary objects without having to invoke substrata. Thus, consistency seems to imply either that substrata require further substrata as individuators (an absurdity), or else that substrata are not required in order to individuate ordinary objects.[16]

Michael Loux adds to this objection the further point that since bare particulars have a number of properties essentially (being coloured if green, being incapable of being in more than one ordinary object at a given time, being self-identical), then two bare particulars *a* and *b* could share all these properties in common and we would need to postulate further bare particulars to individuate *a* and *b*, and so on to infinity.[17] This is a vicious infinite regress

according to Loux and, most likely, some sort of argument like this is behind Hoffman's and Rosenkrantz's claim that there is an absurdity in requiring further substrata to individuate substrata.

How strong are these points? They don't seem to succeed. Hoffman and Rosenkrantz are correct in their claim that properties (neither pure nor impure) cannot individuate, although the reason they give (that substrata do not have properties) is incorrect. They are also correct to say that if some other entity like location is needed to individuate substrata, then the latter are rendered superfluous. But why should one think that bare particulars need further entities to individuate them and so on to infinity? The argument explicit in Loux and implicit in Hoffman and Rosenkrantz can be clarified by the following consideration. Consider the spots Socrates and Plato. Now each is a state of affairs with the following constituents included in their assay: spothood, being round, being red, the tie of predication, and the bare particular *a* for Socrates and *b* for Plato. According to the argument under consideration, one can also take bare particular *a* and *b* to be states of affairs with these constituents in them: particularity, being self-identical, etc., and bare particular a_1 in *a* and b_1 in *b*, and on to infinity.

The problem with this argument is that it treats bare particulars as wholes, namely, states of affairs with properties as constituents within them. But this is wrong. Bare particulars are simples with properties tied to them. The reason Socrates and Plato need individuators is that they share all their pure properties in common, pure properties are universals, and neither impure properties nor spatial locations or external relations can do the job required of individuators. But the bare particulars *a* and *b* in Socrates and Plato are simples and, as a matter of primitive fact, they simply come individuated, even if properties are necessarily tied to them in that they could not exist without properties. Thus, the regress does not get going and this objection fails.

One final objection remains. There is no evidence to suggest that bare particulars can exist without any properties at all, nor does it seem coherent to think that this is possible given some of the points mentioned in the past few pages. Yet on the current characterization of bare particulars as primitive individuative simples with properties tied to them in a primitive way ungrounded in capacities or properties within those bare particulars, it seems that it is

inexplicable as to why bare particulars always come tied to certain properties (e.g. particularity). What is to keep them from simply splintering off on their own, as it were? And if this is, in fact, a possibility, doesn't this show that, after all, bare particulars involve an incoherence in this respect?

It is doubtful that there is an adequate answer to this question if one just thinks of bare particulars as simples and leave it at that. For if that were all there were to the matter, then it would be hard to see why any simple couldn't just exist on its own. For it could be argued that what is meant by saying that a simple could "just exist on its own" is that a simple does not depend for its existence on internal constituents because a simple has no constituents. A constituent/whole framework is inapplicable for simples and since bare particulars are simples, they are not dependent but, rather, independent entities.

However, there are two more promising lines of response to this problem open to the defender of bare particulars. The first one rests on the claim that there does not seem to be a possible world in which a bare particular exists but does not have certain things true of it. Now, a certain distrust is warranted for certain candidates for transcendental properties truly predicable of all entities whatsoever, for example being coloured if green, disjunctive properties like being a horse or not being a horse or negative properties. But if there are, in fact, genuine transcendental properties, such as being one, goodness and so on, then these would be true of bare particulars in all possible worlds. The issue here is not to identify a list of those transcendental properties because one suspects that philosophers will be more willing to agree that there are such properties than they will about the precise list of properties that qualify to be on the list. My point is that if there are such properties, then bare particulars cannot exist without them. Besides transcendental properties, it would also seem necessarily the case that bare particulars have the properties of particularity and simplicity as well.

A second line of response involves identifying a general theory of existence that requires entities to have properties in order to exist. If some sort of theory of this type is defensible, then it would entail that nothing could exist without properties, bare particulars included. A detailed defence of such a theory cannot be undertaken

here, although more is said about it in Chapter 6. But it is worth pointing out that many philosophers have recognized that if something exists, then it has properties and that non-existent entities have no properties at all. Now, it is a mistake to go on to identify existence as a property simpliciter. Kant's well known critique of this position is widely recognized as successful. A closely related, although better theory of existence is this: existence is the *having* of a property or the *being had* by a property.[18] On this view, one can define what it is for some entity x to come to be as follows: there is at least one property P which is such that x has P and there is no property Q which is such that x had Q.[19]

So much for this gloss on what existence is. If this view or some relevantly similar cousin is correct, then it would entail that bare particulars cannot exist without properties. In order to avoid the appearance of being ad hoc or begging the question, it is important to say that the type of theory of existence being suggested should be formulated in light of broad, general ontological issues and then applied to the question of bare particulars.

Notes

Chapter 1 – The problem(s) of universals

1. The term "property" is used in two different senses. It may be used to refer both to monadic properties and relations or it may be used as a synonym for monadic properties in contrast to relations. I shall adopt the second usage. The problem of universals is about both properties and relations, but this work shall focus on properties and bring in issues involving relations only as they are relevant to the former.
2. Due to certain paradoxes (e.g. the set of all sets that are not members of themselves), it is important in some contexts to distinguish sets from classes. However, for historical reasons, we will use the two synonymously.
3. An impure property (e.g. being identical to Socrates, being to the left of the desk) is one whose description requires reference to a particular, and a pure property (e.g. being red) is one whose description requires no such reference.
4. I shall use "property", "attribute" and "quality" interchangeably.
5. There are, of course, several shades of redness. For ease of exposition I shall use "red" and similar locutions to stand for an infimae species of redness (and likewise for other property terms) unless otherwise indicated. An infimae species of a property is the lowest level determinate under a broad property below which no further differentiation can be made. In this context, it would be a specific shade of redness.
6. D. M. Armstrong has surveyed several varieties of extreme nominalism in *Universals and Scientific Realism Vol. 1: Nominalism and Realism*, (Cambridge: Cambridge University Press, 1978), 10–57. He uses the term "nominalism" for what I am calling extreme nominalism.
7. D. C. Williams, "On the Elements of Being: I", *The Review of Metaphysics* 7 (September 1953), 3–18; K. Campbell, *Metaphysics: An Introduction* (Encino, Calif.: Dickenson Publishing Company, 1976), 206–19.
8. C. Landesman, "Abstract Particulars", *Philosophy and Phenomenological Research* 33 (March 1976), 323–37.
9. G. Bergmann, *Realism: A Critique of Brentano and Meinong* (Madison, Wis.: University of Wisconsin Press, 1964), 25.
10. N. Wolterstorff, *On Universals* (Chicago, Ill.: University of Chicago Press, 1970), 130–39.

11. Ibid., 133–4.
12. G. B. Matthews & S. M. Cohen, "The One and the Many", *Review of Metaphysics* **21** (June 1968), 630–55.
13. J. R. Jones, "What Do We Mean by an 'Instance'?" *Analysis* **11** (October 1950), 1–9.
14. E. Husserl, *Logical Investigations* [2 vols] (trans. J. N. Findlay), (London: Routledge & Kegan Paul, 1970), especially vol. I, 408–10, vol. II, 427, 436, 440, 453, 467–8.
15. Nicholas Wolterstorff takes predication to be the most important of the three. See *On Universals*. Panayot Butchvarov claims that resemblance is primary in *Resemblance and Identity* (Bloomington, Ind.: Indiana University Press, 1966). Michael Loux chooses abstract reference to be fundamental in *Substance and Attribute* (Dordrecht, Holland: D. Reidel Publishing Company, 1978). I see no reason to choose any as most important.
16. Cf. Jones, "What Do We Mean by an 'Instance'?"; J. R. Jones, "Characters and Resemblances", *Philosophical Review* **60** (October 1951), 551–62; J. R. Jones, "Are the Qualities of Particular Things Universal or Particular?" *Philosophical Review* **58** (March 1949), 152–70.
17. Wolterstorff, *On Universals*, 235–60. I emphasize that I will draw on Wolterstorff's views in *On Universals* because in the decade between his article "Qualities", *Philosophical Review* **69** (1960), 183–200, and *On Universals*, his views changed significantly. In the 1960 article, he held that a quality could be identical with what he called a quality class. A quality class differs from a kind for Wolterstorff in that the former can be treated as a set and it has concrete and abstract particulars as its members. For a criticism of Wolterstroff's earlier views, see D. Brownstein, *Aspects of the Problem of Universals* (Lawrence, Kans.: University of Kansas Press, 1973), 5–15 and D. Casper, "On Wolterstorff's Nominalistic Theory of Qualities", *Philosophical Studies* **30** (1976), 115–19. Wolterstorff responds to Casper's article by admitting that while his former views were wrong, his notion of the universal as a kind is more adequate. See N. Wolterstorff, "Response to Dennis Casper", *Philosophical Studies* **30** (1976), 121–4.
18. Cf. Loux, *Substance and Attribute*; M. J. Loux, "Kinds and the Dilemma of Individuation", *The Review of Metaphysics* **27** (June 1974), 773–84; M. J. Loux, "The Concept of a Kind", *Philosophical Studies* **29** (1976), 53–61.
19. I have excluded Aristotle from the list because I am not certain what his view is. There is a major debate over whether instanced forms for Aristotle are particulars or universals. The issue has been debated in both the category of substance and the category of quality. For some of the relevant literature in this debate, see D. K. Modrak, "Forms, Types, and Tokens in Aristotle's *Metaphysics*", *Journal of the History of Philosophy* **17** (October 1979), 371–81; G. E. L. Owen, "Inherence", *Phronesis* **10** (1955), 97–105; R. E. Allen, "Individual Properties in Aristotle's *Categories*", *Phronesis* **14** (1969), 31–9; J. Duerlinger, "Predication and Inherence in Aristotle's *Categories*", *Phronesis* **15** (1970), 179–203; M. J. Loux, "Form, Species and Predication", *Metaphysics* Z, H, and Θ", *Mind* **88** (January 1979), 1–23.
20. Cf. W. Künne, "Criteria of Abstractness: The Ontologies of Husserl, Frege, and Strawson Against the Background of Classical Metaphysics", in *Parts and Moments: Studies in Logic and Formal Ontology*, B. Smith (ed.) (Munich: Philosophia Verlag, 1982), 419–32.

21. Wolterstorff, *On Universals*, 239–41.
22. Loux, "The Concept of a Kind," 54.
23. See Bergmann, *Realism*, 3–21.
24. R. Grossmann, *The Existence of the World: An Introduction to Ontology* (London: Routledge, 1992), 1–45; *The Categorical Structure of the World* (Bloomington, Ind.: Indiana University Press, 1983), 102–54.
25. Loux, *Substance and Attribute*, Chs 2–5; M. J. Loux, *Metaphysics: A Contemporary Introduction* (London: Routledge, 1998), Chs 1–2.
26. There has been a debate over whether or not Plato would be a realist in the sense just defined. For at times, Plato takes a form as something transcendent from and copied by its instances. For more on this, see Brownstein, *Aspects of the Problem of Universals*, 49–61; R. E. Allen, "Participation and Predication in Plato's Middle Dialogues", in *Studies in Plato's Metaphysics*, R. E. Allen (ed.) (New York: The Humanities Press, 1965), 43–60; L. Spellman, "Patterns and Copies: The Second Version of the Third Man", *Pacific Philosophical Quarterly* 64 (1983), 165–75.
27. Cf. Armstrong, *Nominalism and Realism*; D. M. Armstrong *Universals and Scientific Realism Vol. 2: A Theory of Universals* (Cambridge: Cambridge University Press, 1978); D. M. Armstrong, *Universals: An Opinionated Introduction* (Boulder, Colo.: Westview Press, 1989); D. M. Armstrong, *A World of States of Affairs* (Cambridge: Cambridge University Press, 1997).
28. G. F. Stout, "Are the Characteristics of Particular Things Universal or Particular?" *Proceedings of the Aristotelian Society*, supp. vol. 3 (1923), 114–22; G. F. Stout, "The Nature of Universals and Propositions", in *The Problem of Universals*, C. Landesman (ed.) (New York: Basic Books, 1971), 153–66; G. F. Stout, "Universals Again", *Proceedings of the Aristotelian Society*, supp. vol. 15 (1936), 1–15.
29. See D. J. O'Connor, "Stout's Theory of Universals," *Australasian Journal of Philosophy* 27 (1949), 46–69.
30. Stout uses "class" or "kind" interchangeably, but both words are what I mean by set/class and not kind.
31. Williams, "Elements of Being, I"; D. C. Williams, "On the Elements of Being: II", *The Review of Metaphysics* 7 (December 1953), 171–92; D. C. Williams "Necessary Facts", *The Review of Metaphysics* 16 (June 1963), 601–26.
32. Cf. K. Campbell, "Abstract Particulars and the Philosophy of Mind", *Australasian Journal of Philosophy* 61 (June 1983), 129–41; K. Campbell, "The Metaphysics of Abstract Particulars", in *Midwest Studies in Philosophy Volume 6: The Foundations of Analytic Philosophy*, P. A. French, T. E. Uehling, H. K. Wettstein (eds) (Minneapolis, Minn.: University of Minnesota Press, 1981), 477–88; Campbell, *Metaphysics: An Introduction*, 206–19; K. Campbell, *Abstract Particulars* (Oxford: Basil Blackwell, 1990).
33. I have been using "relation" and a number of philosophers would rather use "nexus" to avoid problems like Bradley's regress. More on this later.
34. Bergmann, *Realism*, 89.
35. Ibid., 54.
36. Armstrong, *A Theory of Universals*, 172.
37. Armstrong, *Universals*, 43–4, 55, 100.
38. Grossmann, *The Existence of the World*, 30. Cf. 30–41.
39. Jones, "Characters and Resemblance".
40. Wolterstorff, *On Universals*, 235–60.

41. Campbell, "Abstract Particulars", 129.
42. Howard Robinson, *Matter and Sense* (Cambridge: Cambridge University Press, 1982), 50.
43. See Grossmann, *The Existence of the World*, 1–45; cf. J. P. Moreland, "Review of *The Existence of the World: An Introduction to Ontology* by Reinhardt Grossmann", *Mind* **102** (July 1993), 407–10.

Chapter 2 – Extreme nominalism and properties

1. R. Chisholm, *A Realistic Theory of the Categories* (Cambridge: Cambridge University Press, 1996), 53.
2. Armstrong, *Nominalism & Realism*, 19–21.
3. Thomas Aquinas, *Summa Theologica* I, Q. 46, Art. 2, Reply Obj. 7; cf. *Summa Contra Gentiles* I, Chapter xiii.
4. Armstrong, *Universals*, 88–9.
5. Armstrong, *Universals and Scientific Realism*, 18–21. Subsequently, Armstrong has rejected the force of certain regress arguments, specifically, those that involve supervenient entities that are entailed by subvenient entities in every possible world in which the latter exist. Cf. *Universals*, 36, 53–7, 108–9. Unfortunately, Armstrong's view of supervenient entities is not clearly correct and, indeed, seems false. It is not clear why some entity, e.g. being colourful, is not a self-identical, real entity even if it is entailed by being red in every world in which the latter is exemplified.
6. D. Hume, *A Treatise of Human Nature*, 2nd edn, P. H. Nidditch (ed.) (Oxford: Clarendon, 1976), 20.
7. The only criticism that may not be applicable to concept EN is the claim that properties outnumber concepts. It is possible to hold that while predicates are human inventions, concepts are not and, thus, there is a plenteous supply to go around. Still, an advocate of EN must be careful not to characterize concepts as universals and, indeed, many realists take then to be such, specifically, intentional properties.
8. Although this is seldom recognized, to be consistent, EN would seem to require a further reduction of exact similarity relations to some other entity that is consistent with one of the other forms of EN, since if taken at face value, exact similarity is a relational property and EN eschews properties. This issue shall not be probed further. In Chapter 3 we shall see that moderate nominalists should take exact similarity as an internal relation but they are not consistent on this point. For a more exotic view of resemblance, see David Lewis, "New Work for a Theory of Universals?" *Australasian Journal of Philosophy* **61** (December 1983), 347–8. Cf. Butchvarov, *Resemblance and Identity*, 101–34; P. K. Butchkarov, *Being Qua Being* (Bloomington, Ind.: Indiana University Press, 1979), 196–206.
9. B. Russell, *The Problems of Philosophy* (Oxford: Oxford University Press, 1959), 96–7; Husserl, *Logical Investigations*, vol. I, 410–11.
10. Armstrong claims that the object regress fails here. See *Universals & Scientific Realism*, 53–4. The realist could argue that saying *a* is F iff *a* resembles a paradigm requires either the paradigm to be F simpliciter (which commits one either to accepting a property or to reducing resemblance EN to another version) or it requires the introduction of a second paradigm for the first one, and on to infin-

ity. Armstrong says this argument won't work because EN could loop things back into a circle, e.g. the first set of paradigms are F in virtue of the second set and vice versa. But this response won't work for the following reason. While a normal treatment of exact similarity treats it as symmetrical, the work exact similarity is required to do in resemblance EN requires it to be asymmetrical in an important sense. Other particulars are F "in virtue of" or as "determined by" (Armstrong's terms) the paradigm. Now this expresses a metaphysical dependence and, thus, generates a per se regress, which is, in fact vicious. One way to see this is to note that such a metaphysical dependence is transitive, so that if *a* is F in virtue of standing in R to *b* and *b* is F in virtue of standing in R to *a*, then *a* is F in virtue of standing in R to itself. This amount to treating *a* being F as either a sort of "self-causation", which is impossible, or else as a primitive fact about *a*, which is contrary to resemblance EN.

11. Loux, *Substance and Attribute*, 45–7; Butchvarov, *Being Qua Being*, 196–9. Cf. R. I. Aaron, *The Theory of Universals* (Oxford: Clarendon Press, 1967), 156.
12. Butchvarov also analyses the regress as an ontological one, but he simply asserts that, so understood, the regress is not vicious since it is a potential infinite (he explicitly likes it to the "infinite divisibility of space", which is a potential infinite). See *Being Qua Being*, 196–7. Not only does he fail to justify this claim but, so understood, it may be assimilated for our purposes to the epistemic regress.
13. Husserl, *Logical Investigations*, vol. II, ch. 1, sections 1–4.
14. W. Sellars, "Abstract Entities," *Review of Metaphysics* **XVI** (1963), 627–71. My discussion of Sellars is heavily indebted to Loux, *Substance and Attribute*, 77–87. Cf. Loux, *Metaphysics*, 69–79.

Chapter 3 – Moderate nominalism and properties

1. Stout, "Are the Characteristics of Particular Things Universal or Particular?"; Stout, "The Nature of Universals"; Stout, "Universals Again".
2. See O'Connor, "Stout's Theory of Universals".
3. Stout uses "class" or "kind" interchangeably, but both words are what I mean by set/class and not kind.
4. Cf. Jones, "Characters and Resemblance", 552.
5. Armstong, *Nominalism and Realism*, 84.
6. Cf. Campbell, *Abstract Particulars*.
7. Cf. Campbell, "Abstract Particulars"; Campbell, "The Metaphysics of Abstract Particulars"; Campbell, *Metaphysics: An Introduction*, 206–19.
8. Campbell, *Metaphysics: An Introduction*, 213.
9. Campbell, "Abstract Particulars", 141.
10. Ibid., 130.
11. For a detailed critique of Campbell's notion of exact similarity, see J. P. Moreland, *Universals, Qualities, and Quality-Instances* (Lanham, Md.: University Press of America, 1985), 8–11, 41–5, 109–33. It is possible to identify exact similarity as identical to the entire set of exactly resembling tropes, or to identify different "kinds" of exact similarity relations with different sets of exactly resembling tropes (e.g. red tropes, sweet tropes), or to view exact similarity as a genuinely relational entity that is either a dyadic or an *n*-adic relation holding among *n* tropes. I will only consider the dyadic view because it is the most likely one to ascribe to Campbell and, in any case, it is the most plausible.

12. Bergmann, *Realism*, 54.
13. Armstrong, *Universals and Scientific Realism*, vol. 2, 172.
14. Armstrong, *Universals*, 43–4, 55, 100.
15. See Williams, "Elements of Being: I"; Williams "Elements of Being: II"; Williams "Necessary Facts".
16. Campbell, *Metaphysics: An Introduction*, 216–17.
17. Campbell, "The Metaphysics of Abstract Particulars", 484.
18. D. M. Armstrong is one of the few naturalists to see and note this point. See, "Can A Naturalist Believe in Universals?", in *Science in Reflection*, E. Ullmann-Margalit (ed.) (Boston, Mass.: Kluwer Academic Publishers, 1988), 111–12; Armstrong, *A Theory of Universals* (Cambridge: Cambridge University Press, 1978), 84–8. There are two main reasons why naturalists must eliminate or reduce internal relations. First, such relations presuppose entities (e.g. essences, non-spatiotemporal quality orders like the colours, logical syllogisms taken as abstract objects) or a type of wholism (e.g. living things are Aristotelian substances and not structured systems of separable parts standing in external relations) hard to harmonize with naturalism. Secondly, it is difficult to locate them spatially and temporally.
19. Campbell, *Abstract Particulars*, 37, 38, 59–60.
20. Cf. Moreland, *Universals, Qualities, and Quality-Instances*, 71–4; J. P. Moreland, "Keith Campbell and the Trope View of Predication", *Australasian Journal of Philosophy* 67 (December 1989): 379–93. For Campbell's admission of the force of these puzzles, see Campbell, *Abstract Particulars*, 65–6.
21. It is important to note that the problems revealed by these puzzles have nothing essentially to do with the fact that Campbell held to a bundle theory of substance. If one held a trope version of a traditional, Aristotelian-type view of substance, with minor adjustments, these same puzzles would apply. Dogs as much as reds exactly resemble each other and are individuated. And on Campbell's earlier view, a dog's nature would differ from its location by a distinction of reason. Elsewhere, I have criticized what amounts to a trope ontology combined with a traditional substance view. See J. P. Moreland, "How to be a Realist in Nominalist Clothing", *Grazer Philosophische Studien* 39 (Summer 1991), 75–101.
22. The primary place where Campbell has expressed his new position is *Abstract Particulars*.
23. Campbell, *Abstract Particulars*, 56–8; 89–90.
24. F. Suárez, *Disputationes Metaphysicae: Disputation VII: On the Various Kinds of Distinctions*, 1: 13–15 (trans. C. Vollert) (Milwaukee: Marquette University Press, 1947), 24–7.
25. Campbell, *Abstract Particulars*, 68–9
26. Ibid., 37, 59–60
27. Ibid., 31, 37–40.
28. Ibid., 67, 150–51, 172.
29. Jaegwon Kim, "Mental Causation and Two Conceptions of Mental Properties", unpublished paper delivered at the American Philosophical Association Eastern Division Meeting, Atlanta, Georgia, December 27–30, 1993, 22–3.
30. Campbell, *Abstract Particulars*, 37. See Armstrong, *Universals*, 56, 100. For Armstrong, the supervenience relation is the "nothing over and above" relation such that supervenient entities do not add any real, new entites to one's ontology.

31. G. Dawes-Hicks, "Are the Characteristics of Particular things Universal or Particular?", (in symposium with G. E. Moore and G. F. Stout), *Aristotelian Society Supplementary Volume* 3 (1923), 172.
32. Campbell, *Abstract Particulars*, 135–55.
33. Campbell says that if an entity is conventional, then it isn't real or natural, yet he also says that manifest tropes are not figments even though their identity conditions are arbitrary and conventional. These and other confusions permeate Campbell's discussion of these issues. See *Abstract Particulars*, 137, 152.
34. Ibid., 146.
35. Ibid., 37, 100–101, 103, 110, 121–2.
36. Ibid., 67, 150–51, 172.
37. Ibid., 98, 100, 101, 103–4, 110, 121–2.
38. Ibid., 125, 132, 145, 148, 150, 152–5.
39. See J. P. Moreland, "Was Husserl a Nominalist?" *Philosophy and Phenomenological Research* 49 (June 1989), 661–74.
40. Campbell, *Abstract Particulars*, 20, 22, 27, 56, 60.
41. Ibid., 27, 89.
42. Ibid., 37–8, 59–60.
43. Ibid., 9–10, 68–71.
44. Ibid., 70.
45. Ibid., 43–5.
46. Elsewhere, I have raised other arguments against Campbell's earlier views and some of my points are equally relevant to his current position. Cf. Moreland, "Was Husserl a Nominalist?; Moreland, "Keith Campbell"; J. P. Moreland, "Nominalism and Abstract Reference", *American Philosophical Quarterly* 27 (October 1990), 325–34; J. P. Moreland, "Issues and Options in Exemplification", *American Philosophical Quarterly* 33 (April 1996), 133–47.

Chapter 4 – Minimalist realism: Wolterstorff's kinds and Armstrong's properties

1. I will focus on the mature expression of Wolterstorff's views expressed in *On Universals*. In the decade between his article "Qualities" and *On Universals* his views changed significantly. In the 1960 article, he held that a property could be identical with what he called a quality-class. A quality-class differs from a kind for Wolterstorff in that the former can be treated as a set and it has concrete and abstract particulars as its members. For a critique of Woltersdorff's earlier views, see Brownstein, *Aspects of the Problem of Universals*, 5–15 and Casper, "On Wolterstorff's Nominalistic Theory of Qualities". Wolterstorff acknowledges the force of Casper's critique of his earlier view in "Response to Dennis Casper". Further, I will not be treating Wolterstorff's positive arguments for the existence of cases in addition to kinds. His arguments are among those treated in the discussion of puzzles raised against Campbell's tropes in Chapter 3. For an further refutation of Wolterstorff's positive arguments, see J. Levinson, "The Particularization of Attributes", *Australasian Journal of Philosophy* 58 (June 1980), 104–6.
2. Wolterstorff, *On Universals*, 7.
3. Ibid., 239–41; cf. 253–6.

4. Ibid., 235.
5. N. Wolterstorff, "Bergmann's Constituent Ontology", *Nous* 4 (May 1970), 125.
6. This can be seen by comparing Loux, *Substance and Attribute*, 5, 133, 157–8 and 178.
7. Woltersdorff, *On Universals*, 138–41.
8. Ibid., 255–6.
9. Ibid., 252–3.
10. Ibid., 133.
11. Wolterstorff equivocates on what counts as an instance. In *On Universals*, a case (like Socrates's wisdom) is an instance of a universal (p. 91) and a concrete particular (Socrates) is an instance of a universal (p. 174). However, the former usage is his usual one. He explicitly states that "if *x* is a case of *y*, I shall say that *x instantiates y*" (p. 89). I am following him in this use of "instance".
12. Ibid., 252–6.
13. Ibid., 240.
14. Wolterstorff, "Bergmann's Constituent Ontology", 115–26.
15. An exception to this would be Wolterstorff's use of the property of "being identical to A" for some entity A. I assume Wolterstorff means for this property to be an essential constituent in A. See below for more on his use of this property.
16. There is an immanent realist view that I am not considering here. Two of its main advocates have been W. E. Johnson, *Logic: Part I* (New York: Dovers Publications, 1964), 173–85; J. Cook Wilson, *Statement and Inference: Volume I* (Oxford: Clarendon Press, 1926), 333–53. See also, R. L. Beck, "John Cook Wilson's Doctrine of the Universal", *The Monist* 41 (October 1931): 552–82. Perhaps the clearest statement of this view appears in two articles by J. R. Jones: "What Do We Mean by an 'Instance'?" and "Are the Qualities of Things Universal or Particular?" This view extends the genus/species or determinable/determinate relation to the way a first order universal is related to its cases. Thus, this view represents an immanent realist attempt to explain how the determinable is "in" the determinate and, therefore, to give an account of the "is a case of" relation. There are two main features of this view relevant to the discussion of Wolterstorff. First, the property-instance (i.e. case) is a simple. The universal is the essence or nature of the instance but the universal is not construed as one entity in the instance among others. In particular, there is nothing outside the nature of the universal (say, an individuator) that is "in" the instance. The universal "covers the nature of" the instance. Secondly, the instance does not *have* its universal, it *is* the universal. Panayot Butchvarov says that the relationship between the universal and its case (he addresses the genus/species relation as it obtains between second and first order universals, but it is clearly this same relation held by Jones and Cook Wilson to obtain between a first order universal and a case) is a "kind of identity"; see Butchvarov, *Resemblance and Identity*, 147–53. This "kind of identity" is illustrated by Butchvarov by saying that if F is a generic universal and *m* and *n* are two of F's species universals, then F is in some sense identical to *m* and *n*, and in another sense F is different from *m* and *n*. This same statement could be made where F is a first order universal and *m* and *n* are two cases. There are three reasons I have not considered this position as a possible way of understanding Wolterstorff. First, it suffers from the same problems that are being explicitly raised against Wolterstorff since it depicts an

instance as a simple entity. Secondly, it is unclear what a "sort of identity" could mean here. This understanding of the genus/species relationship does little to clarify what Wolterstorff means by "is a case of". Thirdly, and most importantly, Wolterstorff explicitly states on pages 147–8 of *On Universals* that the universal can have many instances but it cannot be individualized. Since Jones and Cook Wilson hold that the instance is identical to the universal individualized, this cannot be Wolterstorff's view of "is a case of".

17. H. Hochberg, "Things and Qualities", in *Metaphysics and Explanation*, W. H. Capitan and D. D. Merrill (eds) (Pittsburgh: University of Pittsburgh Press, 1964), 95. Cf. H. Hochberg, "Universals, Particulars, and Predication", *The Review of Metaphysics* 19 (September 1965), 100.
18. Armstrong, *Nominalism and Realism*, 87.
19. Wolterstorff, "Bergmann's Constituent Ontology", 118–21.
20. Ibid., 134.
21. J. Perry, "Review of *On Universals*, by Nicholas Wolterstorff", *The Journal of Philosophy* 71 (May 1974), 254.
22. See Armstrong, *Nominalism & Realism*; Armstrong, *A Theory of Universals*; D. M. Armstrong, "Naturalism, Materialism, and First Philosophy", *Philosophia* 8 (1978), 261–76; Armstrong, "Can A Naturalist Believe in Universals?"; Armstrong, *Universals*; D. M. Armstrong, *A World of States of Affairs* (Cambridge: Cambridge University Press, 1997).
23. Armstrong, *Nominalism & Realism*, 130.
24. Armstrong, "Naturalism: Materialism and First Philosophy", 262.
25. Armstrong, "Can A Naturalist Believe in Universals?", 111–12; Armstrong, *A Theory of Universals*, 84–8.
26. See Armstrong, *Universals*, 75–7, 81–2, 98–9.
27. Ibid., 8, 39–41.
28. See Grossmann, *The Existence of the World*, 27–8.
29. Armstrong, *Nominalism and Realism*, 109.
30. See Armstrong, *A World of States of Affairs*, 28–31.
31. For an excellent analysis of Frege's ontology, see E. D. Klemke (ed.), *Essays on Frege* (Urbana, Ill.: University of Illinois Press, 1968).
32. Reinhardt Grossmann has shown that Armstrong's view of relations as spatial is even more problematic than is his position on properties. See Grossmann, *The Existence of the World*, 26–8; cf. 51–7.
33. See Moreland, "Was Husserl a Nominalist?".
34. Armstrong, *Nominalism & Realism*, 64–6, 68–9, 102; Armstrong, *A Theory of Universals*, 3, 76.
35. See Armstrong, *Universals*, 113–33.
36. Ibid., 122.
37. R. Connell, *Substance and Modern Science* (Notre Dame: University of Notre Dame Press, 1988), 90.
38. Armstrong, *Universals*, 94.
39. Armstrong, *A World of States of Affairs*, 124; cf. 95–112; 123–7. Armstrong's only problem with Locke's view of a substratum, is that it was an unknown postulate and Armstrong insists that the particularity of a thick particular is presented in acts of perception. Unfortunately, he is not as clear on this as one might wish because he seems to go back and forth between identifying what is so presented as: the fact that thick or propertied particulars are not exhausted

by their properties and relations; and the thin particular itself. But the victory of particularity (which Armstrong accepts) does not clearly allow one to assert the latter, just because one is acquainted in acts of perception with the thick particular *qua* particular.

40. For Armstrong's rejection of bare particulars in sense one, see *A World of States of Affairs*, 86, 153, 267–8. For a defence of bare particulars as individuators, see J. P. Moreland, "Theories of Individuation: A Reconsideration of Bare Particulars", *Pacific Philosophical Quarterly* 79 (September 1998), 251–63.
41. Armstrong, *A World of States of Affairs*, 107–11, 123–6.
42. Robinson, *Matter and Sense*, 50.
43. See Grossmann, *The Existence of the World*, 1–45; cf. Moreland, "Review of *The Existence of the World*", 407–10.
44. J. Seibt, *Properties as Processes: A Synoptic Study of Wilfrid Sellars' Nominalism* (Atascadero, Calif.: Ridgeview, 1990), 184.
45. W. Sellars, *Naturalism and Ontology* (Atascadero, Calif.: Ridgeview, 1979), 109.

Chapter 5 – Traditional realism: properties are abstract objects

1. Seibt, *Properties as Processes*, 184.
2. Grossmann, *The Existence of the World*, 30; cf. 30–41.
3. Dallas Willard, *Logic and the Objectivity of Knowledge* (Athens, Ohio: Ohio University Press, 1984), 187.
4. G. Bergmann, *Logic and Reality* (Madison, Wis.: The University of Wisconsin Press, 1964), 194.
5. Grossmann, *The Categorial Structure of the World*, 107–8; cf. Husserl, *Logical Investigations*, vol. 1, 376–7.
6. Künne, "Criteria of Abstractness", 413; cf. Husserl, *Logical Investigations*, vol. 1, 377.
7. James Alan Talvite, "Properties and Things", PhD dissertation, Vanderbilt University, 1977, 196–201; cf. Husserl, *Logical Investigations*, vol. 1, 377.
8. Cf. K. Mulligan, P. Simons and B. Smith, "Truth-Makers", *Philosophy and Phenomenological Research* 44 (1984), 304–8.
9. Cf. Grossmann, *The Existence of the World*, 33–5.
10. Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomonological Philosophy. First Book: General Introduction to a Pure Phenomenology* (trans. F. Kersten) (The Hague: Martinus Nijhoff Publishers, 1982), 7.
11. Husserl, *Ideas I*, 11.
12. Willard, *Logic and the Objectivity of Knowledge*, 192.
13. Husserl, *Ideas I*, 25.
14. Ibid., 27.
15. Ibid., 8.
16. Husserl, *Logical Investigations*, vol. 2, 467.
17. The entire third investigation of the *Logical Investigations* discusses Husserl's views on parts and wholes, including his notion of foundation.
18. Husserl, *Logical Investigations*, vol. 2, 453.

19. Husserl, *Ideas I*, 28.
20. For more on the difference between containing properties intrinsically vs. having them tied to a bare particular, see Moreland, "Theories of Individuation".

Chapter 6 – Traditional realism: issues and objections

1. Cf. R. Chisholm, *The Problem of the Criterion* (Milwaukee, Wis.: Marquette University Press, 1973).
2. David Lewis holds a specific version of this criterion. See his *On the Plurality of Worlds* (Oxford: Blackwell, 1986), 50–69.
3. This is advocated by D. M. Armstrong. See Armstrong, *A Theory of Universals*, 43–52.
4. Richard Swinburne advances this criterion in *The Evolution of the Soul* (Oxford: Clarendon, 1986), 46–51.
5. See Roderick Chisholm, *On Metaphysics* (Minneapolis, Minn.: University of Minnesota Press, 1989), 143–5; cf. Chisholm, *A Realist Theory of Categories*, 11–21.
6. See Jarrold J. Katz, *Realistic Rationalism* (Cambridge, Mass.: MIT Press, 1998), 25–83; Laurence Bonjour, *In Defense of Pure Reason* (Cambridge: Cambridge University Press, 1998), 186.
7. See Bonjour, *In Defense of Pure Reason*, 153–86.
8. See especially, Husserl, *Logical Investigations*; Husserl, *Ideas 1*.
9. Husserl, *Logical Investigations,* vol. I, 332, 337, 340; ibid., vol. II, 441, 446–7, 453; Husserl, *Ideas I*, 7–8; cf. Husserl, *Logical Investigations,* vol. II, 773–815.
10. Ibid., vol. I, 340, 357, 361, 379; Husserl, *Ideas I*, xxi.
11. Husserl, *Logical Investigations,* vol. I, 337, 340, 357, 389, 390–91.
12. Ibid., vol. I, 337, 357, 383.
13. Ibid., vol. I, 337, 339–40, 357, 377, 379; ibid., vol. II, 482; Husserl, *Ideas I*, 8, 25.
14. Ibid., 39–40.
15. D. M. Armstrong, *Universals*, 76–7; cf. 75–82.
16. Ibid., 75, 81, 84, 92, 94, 96.
17. Given that both moderate nominalists and realists embrace the existence of properties, the discussion to follow could, with adjustments, be equally appropriated by either camp.
18. I. Kant, *Critique of Pure Reason*, N. K. Smith (trans.) (New York: St Martin's Press, 1965), 505.

Chapter 7 – The individuation of particulars

1. Cf. Hochberg, "Universals, Particulars, and Predication", 89–91.
2. Cf. Alvin Plantinga, *The Nature of Necessity* (Oxford: Clarendon Press, 1974), Chs 4–6.
3. See note 2. Sometimes Leibnizian essences are called haecceities. I will not follow this custom for the following reason. The notion of an haecceity originated in the metaphysics of John Duns Scotus and it has had at least two different meanings in the history of philosophy: primitive thisness, the fundamental actuality of an existent entity that is irreducible to any other category of being, a

positive individuating entity that is formally distinct from a thing's common nature (e.g. humanness); and a Leibnizian essence. In my view, Scotus's notion was the former and the term "haecceity" should be reserved to this usage. I will not consider Scotus's notion because I believe it is either unintelligible if left as a genuine alternative to the other views I am surveying or else it reduces to one of them (e.g. bare particularity). Further, the aim of this chapter is to address major contemporary views and in Chapters 3 and 4, I have already mentioned the way Campbell and Armstrong have appropriated Scotus, or at least their interpretation of Scotus, into their theories of individuation.

4. Plantinga, *The Nature of Necessity*, 72.
5. Cf. A. Plantinga, "Replies to My Colleagues", in *Alvin Plantinga*, J. E. Tomberlin & P. van Inwagen (eds) (Dordrecht: Reidel, 1985), 335.
6. Plantinga, *The Nature of Necessity*, 111.
7. Loux, *Substance and Attribute*, 132–4, 175–8; K. Fine, "Plantinga on the Reduction of Possibilist Discourse", in *Alvin Plantinga*, J. E. Tomberlin & P. van Inwagen (eds) (Dordrecht: Reidel, 1985), 148–55. Unfortunately, both Loux and Fine tend to confuse the metaphysical and epistemological aspects of this problem with the result that most of their complaints boil down to problems of identifying individuals in possible worlds. I agree with Plantinga that this is not a serious problem and that the real difficulty here is metaphysical.
8. It also seems strained to say that proposition 6 asserts two things (Socrates is self-identical and has the property of Socrateity) whereas 5 only asserts one thing. It is simpler to say that both assert that each entity, including Socrates, stand in the relation of identity with itself.
9. Plantinga, "Replies to My Colleagues", 336–40. Plantinga's notion of ontological dependence is the same as my notion of ontological constituent-dependence without the second conjunct.
10. Bergmann, *Realism*, 24, 25.
11. Loux, *Substance and Attribute*, 140–52.
12. J. Hoffman & G. S. Rosenkrantz, *Substance and Other Categories* (Cambridge: Cambridge University Press, 1994), 46–52.
13. E. B. Allaire, "Bare Particulars", reprinted in *Universals and Particulars*, M. J. Loux (ed.) (Notre Dame: University of Notre Dame Press, 1970), 288.
14. Hoffman and Rosenkrantz, *Substance and Other Categories*, 48–9.
15. Connell, *Substance and Modern Science*, 90.
16. Hoffman and Rosenkrantz, *Substance and Other Categories*, 51.
17. Loux, *Substance and Attribute*, 149–52.
18. See J. P. Moreland, "Review of *The Existence of the World: An Introduction to Ontology* by Reinhardt Grossmann", *Mind* **102** (July, 1993), 407–10.
19. Cf. R. Chisholm, "Coming into Being and Passing Away: Can the Metaphysician Help?" in *On Metaphysics*, 49–61, especially p. 56.

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